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# special libraries

December 1976, vol. 67, no. 12

- ☐ Archives
- ☐ On-Line Systems and Searching
- ☐ The Foundation Center
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### LETTERS

### Disappointed

As chairman of the American Correctional Association/American Library Association (HRLSD) Joint Committee on Institutional Libraries, I must say how disappointed I was to read Jean Marie Zabel's "Prison Libraries," Special Libraries, 67(no. 1):1-7 (Jan. 1976).

First, I was surprised to find no mention of the ALA/AHIL Special Committee on Library Service to Prisoners (1972-74) which produced Jails Need Libraries Too: Guidelines for Library Service Programs to Jails (Chicago, ALA, 1974); no mention of the findings of the Survey of Library and Information Problems in Correctional Institutions (Washington, D. C.: U.S. Office of Education, 1974); no mention of the work of the ACA/ALA Joint Committee which produced Library Standards for Juvenile Correctional Institutions (College Park, Md.: ACA, 1975); no mention of the recent work of the ACA Committee on Institution Libraries which has completed a final draft of revised standards for adult correctional institutions and, through a subcommittee, is developing the first national standards for library service to jails; no mention of the fine work of the SRRT/ALA Task Force on Service to Prisoners and its survey of California library service to jails; no mention of the publication Guidelines for Legal Reference Service in Correctional Institutions (College Park, Md., 1973; 2d. revised edition in progress); no mention of the article by Andree Bailey "Standards for library service in institutions: in the correctional setting," Library Trends 21 (Oct 1972), 261-6; and no mention or citation of the numerous papers on correctional library services in the annual Proceedings of the Congress of Corrections (ACA, 1870—to date).

Second, the American Prison Association established a Committee on Institution Libraries in 1938, not 1941 (p. 3); Florida is not one of the states to have all its prisons tied into school districts (p. 5); and, Illinois was not the first state to plan for total library service in correctional facilities at the state level (p. 5). New York and California have better claims to that "first." Why is there no mention of the fine correctional library program in the State of Washington? The overview of prison library activities in the various states (pp. 4-7) is dated and fragmented and thus creates a distorted view of the development of correctional library services.

Unfortunately, this article does not live up to the high standards of *Special Libraries* and I would hope a more careful review will be given to such contributions in the future.

> Barratt Wilkins State Library of Florida Tallahassee, Fla. 32304

### Reply

I am sorry that you were disappointed in my article, "Prison Libraries." To answer most of your questions, the topic of the article was primarily prison libraries, not jail libraries, or prison law libraries, or juvenile correctional institutional libraries, which are complete topics in themselves. As for the currency of the materials, I used what was available. I wrote to a number of persons connected with prisons and I used what they sent. I also purchased all the available ALA material. Since the compilation was done in early 1975, material from 1975 was not available, (see p.7 of the article for the date of acceptance). I am sorry that I could not mention every publication dealing on or near my chosen topic due to the Special Libraries page limitation and I did not intend to compile just a bibliography.

I also wrote to the California State Library and was informed of the four volume Survey of Library and Information Problems which was only available on microfiche. It was unobtainable at the time and so I could only mention it in the 1972 section of the article.

As for the American Prison Association's Committee date, according to the Rhea Rubin article, "U.S. Prison Library Service and Their Theoretical Bases" (pp.4-5), the Prison Association's Committee began in 1941 and the American Correctional Association's Standing Committee on Institutional Libraries began in 1938. I was in error in including Florida in the states having their prison tied into school districts. I inadvertently combined in my notes, the states mentioned in two joining paragraphs. For this I am truly sorry. The statement of Illinois being the first to plan total library service came from the former Chief of library services, Illinois Department of Corrections in Springfield. I am sorry if she was wrong. As stated in the abstract, "Some states are not included due to lack of known information on them.'

If my article gives a "distorted view of the development of correctional library services," it is perhaps due to the fragments of material available. Perhaps someone with information more accessible to them should have attempted such an extensive compilation. Perhaps my attempt will bring about some needed changes in both library service to prisons as well as better dissemination of materials on these services.

> Jean Zabel Legislative Reference Bureau City Hall Milwaukee, Wis. 53202

### A Pat On the Back

The September issue of Special Libraries is excellent! The lead article by Klempner is thought-provoking and incisive, one of the best I've read in any library journal this year. The rest of the articles fit in, in well-balanced fashion, with the first.

Congratulations.

Doris Bolef College of Medicine Library East Tennessee State University Johnson City, Tenn. 37601

### HELP!

I am currently working on a Council on Library Resources Fellowship to examine the role of locally generated title derivative (keyword) indexing in libraries. Librarians currently working in this area are asked to send a brief description of their work to: Philip Schwarz, The Library, University of Wisconsin-Stout, Menomonie, Wis. 54751.

Philip Schwarz Automation Librarian

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### Archival Responsibilities of the Special Librarian

### Jean T. Kadooka-Mardfin

City & County of Honolulu, Municipal Reference & Records Center, Honolulu, Hawaii

■ Articles on archives management often assume that an archives already exists in the organization and proceed to describe ways to arrange and preserve archival material. The concern of this paper is to emphasize the preliminary steps a special librarian can take to influence an organization towards creating an archives. It is the author's belief that this area of librarianship has been neglected by those very li-

brarians who occupy a pivotal position in archives development. This article attempts to broaden the special librarian's knowledge of archives and describes ways to identify archival material. Finally, as an example of a unique experiment, the development and operations of a municipal archives in the City & County of Honolulu are described.

TO MANY PEOPLE, an archives generally refers to a collection of old public records maintained by a government agency. It is to the credit of many governments, that an archives was established where certain public records of historic significance could be preserved. An archives, however, need not refer only to government archives. Private institutions may also have material of archival value such as records describing the founding of a corporation. An archives, then, can be broadly defined as T. R. Schellenberg has stated:

"All books, papers, maps, photographs, or other documentary materials, regardless of physical form or characteristics, made or received by any public or private institution in pursuance of its legal obligations or in connection with the transaction of its proper business and preserved or appropriate for preservation by that institution or its legitimate successor as evidence

of its functions, policies, decisions, procedures, operations, or other activities or because of the informational value of the data contained therein" (6, p. 16).

Just as special libraries can exist in a variety of organizational environments, archives, too, can be created in either a private or public organization. However, few special librarians are aware of the critical role they can play in developing an organization's archives.

Archives are not as widespread as they might be, for several reasons. The failure to recognize the importance of an archives to an organization may be one important reason.

An archives is important for several reasons. Again we turn to Schellenberg who cites four primary reasons for establishing an archives. First, archives are established to improve an organization's efficiency. The well-ordered files of an archives results in efficient location of

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records and other papers. Second, archives are a cultural resource which, as in the case of a public archives, reflects public property and public obligation to the citizenry. A private institution's archives can be a cultural resource if that institution has had a significant impact on the development of a community. Third, archives are established for personal reasons. We can all think of examples of archives established by private individuals as a record of personal achievement. Fourth, the archives of a public organization especially, serve as a record of its official functions, such as tax collection or land sales.

The failure of an organization's records management program may be a contributing factor to the lack of archives development. Records management is a system concerned with the creation, maintenance, and disposal or preservation of records, including forms, correspondence, reports and other material, acquired or produced in the course of an organization's activities. Archives are related to records management because material permanent historical value can be identified during the records appraisal process of a records management program. Certain items which would never normally come before the special librarian would be identified in the records management program. An example might be the minutes of the Board of Directors, which would be of historical interest for a company.

Much more can be written about records management than is possible here. However, a strict emphasis only on filing rules, storage areas, and microfilming neglects the historical information in certain records, which justify preservation. If an organization has a special library and a records management program, but lacks an archives, management should be informed of the oversight and every effort should be made to establish an archives.

The failure of the special librarian to appreciate the role she can play in the creation of an archives is perhaps the most critical reason. Perhaps some special librarians do not have an interest in history.

Others may not have had the training, course work or experience to feel confident in establishing and maintaining an archival collection.

The special librarian, however, does have many skills which lead easily into an archival perspective. The special librarian usually knows her organization's structure and functions. Often the special librarian automatically and regularly acquires the official publications, house organs, and annual reports of the parent organization. She can also identify the key executives of each division and the research interests of her users. She may also have key dates of organizational changes in the reference file. Hopefully, the special librarian has created a climate in the library that is friendly and easily identified with diligent reference and research work. The lack of interest or training notwithstanding, the special librarian often already collects some of the basic developmental information from which a more formalized archives can be derived.

### Difference between Library and Archives

To the librarian, the fields of records management and archives may seem like a foreign country, with a different language and an unfamiliar terrain. In fact, the differences are neither complex nor insurmountable. Some of the distinctive features between library and archives can be described by looking at the way their respective materials are created, acquired, arranged, and used. Let us look at these differences.

Library material are produced in multiple copies for cultural purposes with dissemination of the material clearly in mind. Archival materials are created in the course of performing an organizational function, such as the minutes of a board meeting, and broad dissemination is not necessarily anticipated.

All librarians are aware of selection and acquisition procedures for such items as monographs and serials. Each item is selected as a discrete piece or title and acquired from an outside source (publisher). The information in a publication may also

be available in another cheaper edition such as a paperback book or reprint. Archival material, on the other hand must be looked at in its entirety—the entire function of a charter commission, for example. In addition, the failure to acquire archival material could mean the loss of all information about a particular organizational function because there would not be any duplicates. It would usually be impossible to replace archival material with another set of records, because the internal generation of archival records implies that no other source would have that material.

"... this area of librarianship has been neglected by those very librarians who occupy a pivotal position in archives development."

The arrangement of archival material differs greatly from library material and this may be the greatest source of anxiety among librarians. Archival material are arranged in the same manner they are produced—by organizational function—thereby preserving the functional integrity of the series. For example, an archivist would not separate a particular division's records into subject groups and place into these subjects the records of different agencies. A librarian familiar with the way many large U.S. government documents collections are arranged according to the Superintendent of Documents' (SUDOCS) classification scheme can appreciate the unique arrangement of archival material.

Finally, use of archival material differs in that greater care must be taken to prevent loss. Archival material, as unique copy, must be handled with care; are not usually borrowed or allowed to be removed from the collection. The environmental conditions of storage also requires relative humidity and temperature control. Librarians familiar with rare book preservation are well aware of this problem. High relative humidity and fluctuating temperatures affect the physical and chemical properties of the papers, film,

and photographs, stored in an archives. The acid content of storage envelopes or boxes, dust, insects, rodents, and ultraviolet rays from sunlight can all affect the life of archival material

### The Librarian as Archivist

In some institutions the special library has the dubious honor of receiving a lot of "junk" from retiring officials or conscientious secretaries. In other cases, the librarian must be a veritable sleuth to locate and acquire publications of even the parent organization. In either case, there are opportunities and straight forward steps a special librarian can take to influence the development of an archives where one does not exist.

To stir up support for an archives, the special librarian can take full advantage of certain events to point out the need for or lack of an archives. Anticipate an upcoming anniversary date (using the date of incorporation, the anniversary of the creation of a division) by collecting and displaying pictures and printed material of that event. If display materials are difficult to locate then this is a possible indication of the level of difficulty to be encountered in establishing any archives. Use this opportunity to stress to key executives the value of establishing an archives.

While there have been some who question the development of an archives within a library organization (8), it is not stressed here that the archives must be located organizationally within the special library. However, the special librarian from her particular informational role, can influence the creation of an archives. In addition, the librarian can begin collecting reports and other data which would facilitate archival operations should one be established.

For example, seeing that your special library is designated by management as a depository for all official publications of the parent organization will emphasize to all departments the value and importance of having a central repository and a permanent record of the organization's various activities.

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Another service the library can perform is to keep a current updated list of appointments and service dates of key positions in your organization (presidents, vice presidents, board members, department heads, and other officers). Information in organization charts, telephone directories, employee newsletters or other house organs all help in tracing mergers, company reorganizations or other changes in the organization's structure and functions.

Among the miscellaneous material which may find its way to the library from office clean-up campaigns are nonbook material such as photographs and photographic negatives of company officials (often taken at retirements), new company plants or buildings (perhaps taken at a dedication ceremony), or administrative officials presiding at official functions (business meetings, conferences); newspaper articles reporting about events or people (awards, obituaries) in your organization; statistical records which indicate the size of the work force and the budgets of the organization; business records and speeches, which reveal policy decisions, and executive management philosophies. These are all examples of material you as a special librarian would want to identify, date, and save for your future archivist.

If the opportunity to establish an archives is extended to the librarian, this should be taken as a good indication of management concern and commitment to a worthwhile endeavor. The librarian who does not feel conversant with archival material can find the State Historical Society, State Archives, Society of American Archivists, and individuals working with historic preservation all willing to assist and offer advice. In addition, there are several texts and periodicals which can give her guidelines. A selected list is given at the end of this article.

The critical point here is to use every opportunity to emphasize to management the value of an archives for future researchers and historians. The archives collection need not be large. The collection may cover publications, artifacts, photographs, news articles, and directories as a start. If cooperation can be ar-



ranged with the Records Management section, permanent records can be retained in microfilm form to supplement the material preserved by the special librarian.

Unfortunately, even the best organizations are often not aware of the historymaking day-to-day work of its executives and agencies. When an organization decides at a late date to set up an archives, it is often impossible to recover lost papers and memorabilia. Historical material gathered today and used many years from now can graphically portray the changes and growth of your organization. The special librarian can act as an important catalyst in this transformation by actively working toward archives development, through judicious sifting of memorabilia and through tactful agitation for greater management concern of historical material.

## The Honolulu Municipal Reference & Records Center

The City & County of Honolulu established its Municipal Reference Library in 1929 by city ordinance. This library serves the special reference needs of the employees and administrators of the City & County of Honolulu, by collecting publications relating to municipal government, such as public administration, public finance and budgeting, public works, city planning, transportation, housing, and zoning.

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Advised by the Municipal Librarian, the Mayor by directive and more recently the City Council by ordinance designated the library as a depository for three copies of reports, studies and statistical material published by or for city departments and agencies. This collection which constitutes the core of a historic record of city activities, was identified in 1973 under: "A List of Publications in the Municipal Reference Library issued by or for City and County agencies through June 30, 1972." A supplement is now being planned for 1977.

The Revised Charter of 1973 mandates an expansion of functions for the newly named Municipal Reference & Records Center headed by a director. These responsibilities are:

(a) Fulfill the research and information needs of the city through the acquisition and maintenance of relevant research materials which shall be made available to the executive and legislative branches.

(b) Coordinate a city government records management program and supervise the city archives containing historical and legal documents and materials.

The first mandate is being fulfilled by the Municipal Reference Library section. The second mandate is being developed through the Records Management Program and the Municipal Archives.

### The Records and Archives Program

The Municipal Reference & Records Center is located in City Hall Annex, near City Hall. The Municipal Archives occupies a second floor area of 575 square feet. Temperature is controlled by a separate airconditioner which can be operated twenty-four hours a day. Relative humidity is regulated by a portable dehumidifier. Temperature and humidity readings are taken with a psychrometer to see that temperature is maintained at no higher than 70° F and relative humidity is usually about 60%, with a variation of 2% to 3%.

The Municipal Archives is a natural outgrowth of the records program because records for permanent retention are identified during the records appraisal process. In January 1975 the Federal

Comprehensive Employment and Training Act (CETA) provided funds for the hiring of one full-time Municipal Archivist.

While staffed on a temporary basis, this program has already alerted City departments to the value of preserving historical material. The Municipal Archivist and Records Management Analyst have been visiting each City agency to personally explain the program and assess the quantity and condition of archival material.

Since 1975 the Municipal Archives has acquired more than twenty-one cubic feet of material including photographs dating back to the 1920s, engineering tracings (maps) of public works projects such as street improvements dating to the late 1880s, a variety of artifacts from the Board of Supervisors (now the City Council); and papers of the 1972 City Charter Commission. Still to be accessioned are official material of the City Council including journals of Council proceedings, ordinances, resolutions, and committee reports.

"Archival material, as unique copy, must be handled with care;..."

On-going projects include locating minutes of City Boards and Commissions, conducting occasional historical research into selected topics, preparing a slide show of the archives program for public awareness, and planning for general restoration of older materials.

Eventually, the security copy of all microfilmed material generated by the Records Management program will be stored in the Archives. In addition, the Municipal Reference Library's collection of City & County publications may be turned over to the Archives for greater security.

### Conclusion

It is never too soon to begin an archival collection in your organization. This collection can be used by present researchers, speechwriters, and administrators for background information, for

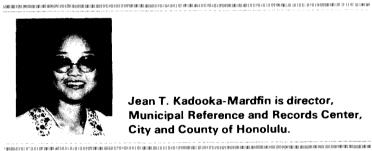
displays and other purposes. The special librarian is in a unique position to generate interest in this area if it does not already exist. She can also begin to take specific steps to acquire certain material of potential historic value in the meantime. This responsibility should not be neglected if future generations are to appreciate and understand the operations of our organizations.

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# Impact of On-Line Systems on a Literature Searching Service

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■ Some experiences with on-line literature searching systems in the Bell Laboratories Libraries and Information Systems Center during 1975 are described. A total of 604 sessions, averaging 15 minutes each, occurred. Average cost per session was approximately \$22, including connect time, communications, and off-line printing. The actual cost of many sessions, however, was \$10 or less. On the average,

on-line searching costs \$1/minute and 10¢/off-line print. A search on a specific subject took an average of two sessions. Details on types of searches performed, the method of charging costs to the user, and some effects on library services are given, as well as some of the advantages of using an on-line system for information retrieval.

ON-LINE systems are widely gaining acceptance in libraries for literature searching and bibliography preparation. From minimal use as recently as 1972, they have grown rapidly until the present, when computer searching is making a large impact on many library operations. With the advent of these systems, and their increasing usefulness as the vendors add data bases, library managers are faced with the decision of whether to introduce such services, and what impact they would have on their operation. Recent papers by Marshall (1), and Williams (2) list many of the factors which must be considered. Other recent papers give users'

experiences and provide a valuable insight into some of the possibilities of these systems. Noteworthy are papers by Bivans (3) (National Oceanic and Atmospheric Administration); Brown, Yeates, and Van Hoesen (4) (National Bureau of Standards); Buckley (5) (Pfizer); Lawrence, Weil, and Graham (6) (Exxon); Prewitt (7,8) (Rohm & Haas); Standera (9) (University of Calgary); and Hitchingham (10) (Oakland University). Several papers address the question of online costs: those by Elman (11), Morton (12), and Chenery (13). It is clear that this is a rapidly growing field, and that uses, methodologies, etc., are by no means standardized.

This paper reports some experiences with on-line searching in the Bell Laboratories Libraries and Information Systems Center during 1975. The environment and clientele have been described previously (14,15), and will be summarized only

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A presentation based on the subject of this paper was given at the 10th Middle Atlantic Regional Meeting of the American Chemical Society, Philadelphia, Pa., Feb. 24, 1976.

briefly here. The company conducts basic and applied research, development, and systems engineering for the Bell System. Bell Laboratories is composed of over 16,000 employees in 18 different locations in 9 states. About 7,000 of the 16,000 employees are professional scientists and engineers. Their information needs are the primary concern of a network of 24 libraries, which is staffed by about 120 persons. Library staff specialists include three Ph.D. Information Scientists, who provide high-level bibliographic and searching services to the technical staff.

On-line literature searching services have been extensively used by the Information Scientists since early 1974. The situation in early 1973 has been described by Hawkins (14). That study showed that only two data bases were available to us on-line, and that machine searches were used in only 32 (25%) of 129 searches. In 1975, the situation was drastically

Development Corporation's ORBIT systems. We had TOXLINE access for six months only; the other systems were available all year.

The Information Scientists routinely keep a log of on-line searches performed. Each time one of the systems is accessed, the following entries are made in the log: date, requester's name and department, search title, data base(s) used, on-line (connect) time, number of off-line prints, and (sometimes) the requester's charge number. The on-line (connect) time and number of off-line prints are recorded for each data used in the search. Separate log sheets are kept for each of the three vendors.

The data for each "session" in 1975 were taken from the appropriate log and tabulated. (Five sessions, using test files or discontinued files are excluded.) For the purposes of this study, a "session" was defined to be one approach to a data base.

### The future of these systems in our environment is predictably bright.

different. Machine searches were used in nearly all of the searches undertaken, and in many cases, the machine search was the only technique used to satisfy the search request. Furthermore, the productivity of the Information Scientists was significantly greater. About twice as many requests were completed with no increase in staff.

The remainder of this paper is devoted to a discussion of our usage statistics for 1975. At the outset, it should be stressed that this is one (albeit rather large and diversified) organization's experience, and the conclusions which one could draw may not be generally applicable. Nevertheless, the experiences reported may be useful and of interest to those with responsibility for similar services, or to those contemplating their introduction.

### **Data Collection**

During 1975, we had access to three online systems: the Lockheed Corporation's DIALOG, the National Library of Medicine's TOXLINE, and the System A "search" constitutes all sessions dealing with a given search topic. Thus, for example, one search may involve three different data bases, or, alternatively, it may involve three uses of the same data base, the search strategy undergoing modifications as preliminary results are reviewed. In either of these cases, three sessions would have been recorded. The relationship between searches and sessions is one of the points of interest in this study and will be discussed later.

### **Number of Sessions**

A total of 604 sessions were recorded. Table 1 shows the breakdown of numbers of sessions for each of the systems. By far, the heaviest use was made of the DIALOG System, with 564 sessions, 8,374 minutes of connect time, and 45,933 items printed off-line. Note that heavy use of the DIALOG System is not meant to imply any value judgement. Rather, it is simply a reflection of a close match between the data bases offered by the DIALOG System and Bell Labora-

Table 1. Search Statistics

Connect				C	ost, \$		
Vendor*	No. of Sessions	Time, Minutes	No. of Prints	Connect Time	Prints	TYMSHARE	Total
Lock	564	8374	45933	6726.57	4373.96	1395.67	12496.20
NLM	18	218	885	54.50	44.25	łncĺ.	98.75
SDC	22	400	1065	471.83	163.01	73.33	708.17
Total	604	8992	47883	7252.90	4581.22	1469.00	13303.12

\*Lock: Lockheed Information Systems NLM: National Library of Medicine SDC: System Development Corporation

Table 2. Data Base Costs

			Cost	
Data Base	Abbrev.	Vendor*	Conn. Time, \$/hour	Off-Line Prints, ¢ each
ABI/INFORM	ABI	Lock	65	10
Biological Abstracts	Biol	Lock	65	10
Chemical Abstracts	CA	Lock	45	8
Chemical Abstracts	CA	SDC	60	12
Chemical Abstracts, 1970–71	CA7071	SDC	60	12
Congressional Information Service	CIS	SDC	120	25
Claims/Chem	Claims	Lock	150	10
Claims/GEM	Claims	Lock	90	10
Engineering Index	El	Lock	65	10
Engineering Index	El	SDC	95	20
Economic Information Systems	EIS	Lock	90	20
Engineering Market Abstracts	EMA	Lock	90	20
Educational Resources	ERIC	Lock	25	10
Funk & Scott Index	F&S	Lock	90	20
Foundation Directory	Found	Lock	60	30
Geological Reference	Georef	SDC	75	20
Mechanical Engineering	ISMEC	Lock	45	10
Library of Congress	Libcon	SDC	120	25
Meteorological Abstracts	Meteor	Lock	50	10
National Agricultural Library	NAL	Lock	25	5
NTIS	NTIS	Lock	35	10
Oceanic Abstracts	Ocean	Lock	55	10
Pollution Abstracts	Pollut	SDC	90	15
Psychological Abstracts	Psych	Lock	50	10
Science Abstracts A (INSPEC)	SAA	Lock	45	10
Science Abstracts B and C (INSPEC)	SAB-C	Lock	45	10
Science Citation Index	SCI	Lock	70	10
Social Science Citation Index	SSCI	Lock	70	10
Domestic Statistics	Stat	Lock	90	20
Toxline	Tox	NLM	15	5

\*Lock: Lockheed Information Systems NLM: National Library of Medicine SDC: System Development Corporation

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Table 3. Average Search Statistics (for 604 Sessions)

	Vendor			
	Lockheed	SDC	NLM	Total
On-Line Time (Min)/Session	15	18	12	15
No. of Off-Line Prints/Session	81	48	49	79
On-Line Cost*/Session	\$14.40	\$24.78	\$3.03	\$14.44
Off-Line Print Cost/Session	\$7.76	\$7.41	\$2.46	\$7.58
Total Cost*/Session	\$22.16	\$32.19	\$5.49	\$22.02
On-Line Cost*/Minute	\$0.96	\$1.38	\$0.25	\$0.96
Off-Line Prints (Each)	\$0.10	\$0.15	\$0.05	\$0.10
Total Search Costs (at 2 Sessions/Search)	\$44.32	\$64.38	\$10.98	\$44.04

<sup>\*</sup>Including TYMSHARE

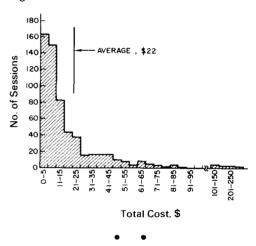
tories' interests. It may also reflect the well-known phenomenon that one tends to feel more at ease with the system first learned (and therefore uses it more often). Other organizations, of course, may find alternate systems more useful for their purposes.

### Session Costs and Time

Costs were calculated for each session using the data in Table 2. Table 2 was taken from the rate schedules supplied by each of the three vendors. (Only the data bases used are included in Table 2: others are also available.) When a data base is available from more than one vendor, and both vendors were used, the cost for both is given. The National Library of Medicine (NLM) charges per page of off-line printing, rather than per item as the other vendors do. In order to afford a basis for comparison, it was assumed for NLM that an average of two items appear on one page. (This is reasonable because many of the items in their system have abstracts.)

Total costs for the year for each of the three vendors appear in Table 1. Note that communications charges are stated separately. Most, if not all, of our accesses were through the TYMSHARE Network, for which Lockheed charged \$10/connect hour, and System Development Corporation charged \$11/connect hour. NLM includes the TYMSHARE costs in its rates. (Costs of personnel or terminal rental are not included. Bell Laboratories does not charge library users for personnel time, and terminals are used

Figure 1. Search Costs



for a wide variety of purposes, in addition to literature searching.) The external online searching expenditures totaled just over \$13,300.

Actual average costs for the three vendors are shown in Table 3. Although Table 2 shows that data base charges vary widely, a rule-of-thumb average of \$1.00 per minute (including TYMSHARE) of search time and 10¢ per off-line print is noteworthy. Our connect time costs (including TYMSHARE) ranged from \$0.50 to \$239.25 per session, with an average of \$14.44. Off-line print costs ranged from \$0 to \$264.90 per session, with an average of \$7.58. [It is of note that 355 sessions (59% of the total) produced no off-line prints.] Total session costs ranged from \$0.67 to \$277.65, with an average of \$22.02. Figure 1 is a histogram

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of total cost versus number of sessions. Although the average cost of the 604 sessions is \$22.02, half of the sessions fall in the range \$0-\$10. The average is raised by a few long and costly sessions.

Elman (11) found the average machine search to cost \$47. If we take into account the ratio of two sessions per search (see the "Sessions and Searches" section of this paper), our average of \$22/session agrees well with Elman's. Morton (12) and Chenery (13) report considerably lower costs, possibly because their averages are not raised by a few large or long searches as those at Bell Laboratories are.

As shown in Table 3, the average session time was 15 minutes. The average search time at two sessions per search is therefore 30 minutes. This figure agrees almost exactly with Hitchingham's (10) reported 32 minutes per MEDLINE search.

### Search Types

Most of these searches were subjectoriented; that is, "Find all reference on Topic A". However, three other distinct types of searches were performed during 1975. The first of these are in-house demonstrations, amounting to 39 (6%) of the 604 sessions. There were 747 minutes of connect time used in this way. The average demonstration, therefore, took about 19 minutes. Demonstrations were done for colleagues (often from other locations), and also for groups of visitors. These demonstrations are valuable in alerting colleagues to the many advantages of on-line searching, as well as showing its potential to others unfamiliar with the technique. (Many visitors are students from nearby library schools who are potential users of on-line services. They find these demonstrations particularly informative.) The second type of search was for a particular author's papers. The library did 43 of these sessions (7% of the total), taking 521 minutes. The average author search was about 12 minutes—notably shorter than the average demonstration or subject search. Finally, tests of search logic and searcher practice amounted to 20 sessions

(3% of the total), taking 235 minutes. The average test or practice session was 12 minutes.

Most of the subject searching involves retrospective searches on a particular topic. One or two continuing (SDI) searches were also done, using the DIALOG System's facility for storing and later retrieving a search profile. A few novel searches were performed; the results of one of these has been published (16).

### Chargebacks

There is a wide variety of schemes to charge the cost of a search back to the end user. Some organizations charge the entire cost to the user, some charge a portion, and others do not charge. Marshall (17), in a survey of academic libraries, found a variety of charging policies, with the end user paying at least a portion of over 60% of the searches. Bell Laboratories' scheme is to charge the out-ofpocket cost (i.e., excluding overhead, staff time, etc.) to the end user when it is likely to exceed a threshold value (presently \$40). In this way, the casual one-time user with a fairly straightforward request perceives the service as another regular "free" library service. It may be argued that this policy unfairly penalizes the frequent user, or the user needing a large volume of information. However, we have experienced no user resistance to our policy. Users generally view the information provided as well worth its cost, and that cost is usually a small fraction of the total cost of a project. Of course, this situation may be different in a non-industrial or non-laboratory environment. (In the study of on-line systems in public libraries conducted by Summit and Firschein (18), demand fell off sharply when charges were instituted, then recovered somewhat.) Under the library's charging policy, 165 (27%) of the 604 searches were charged to a user, and 42% of the total external expenditures were recovered. (Note Added in Proof: In September 1976, the chargeback policy was changed from a "threshold" scheme to a "subsidy" scheme, in which the library

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Table 4. Data Base Usage

		Conn	No. of		Cost, \$	
Data Base *	Sessions	Time, Min.	Off-Line Prints	Conn Time**	Off-Line Prints	Total
ABI	20	262	657	283.00	65.70	348.70
Biol	7	53	428	263.00 57.42	42.80	100.22
CA	164	2334	14886	1789.77	1191.80	2981.57
CA7071	7	118	593	118.00	71.16	
CIS	1	13	126	26.00	31.50	189.16 57.50
CIS	ı	13	120	26.00	31.50	57.50
Claims	7	79	1	163.50	.10	163.60
EI	52	588	1368	646.51	146.50	793.01
EIS	1	5	0	7.50	0.	7.50
EMA	1	1	0	1.50	0.	1.50
ERIC	6	77	649	32.08	64.90	96.98
F&S	11	62	1361	93.00	272.20	365.20
Found	1	11	0	11.00	0.	11.00
Georef	2	41	60	51.25	12.00	63.25
ISMEC	8	58	131	43.50	13.10	56.60
Libcon	2	30	6	60.00	1.50	61.50
Meteor	2	15	68	12.50	6.80	19.30
NAL	2	25	9	10.41	.90	11.31
NTIS	48	669	3265	394.45	326.50	720.95
Ocean	1	9	0	8.25	Ο.	8.25
Pollut	1	15	183	22.50	27.45	49.95
Psych	14	146	696	121.68	69.60	191.28
SAA	81	1905	6795	1428.75	661.56	2090.31
SAB-C	124	2009	14951	1506.75	1389.00	2895.75
SCI	8	60	65	67.91	6.50	74.41
SSCI	9	127	46	148.17	4.60	152.77
Stat	6	62	654	93.00	130.80	273.80
Tox	18	218	885	54.50	44.25	98.75
Total	604	8992	47883	7252.90	4581.22	11834.12

<sup>\*</sup>Full names are shown in Table 2.

pays a fixed amount (initially \$25) of every search, with the excess being charged to the user. This is more equitable to all users than a threshold policy.)

### **Data Base Usage**

Table 4 breaks down usage by data base. Costs were calculated and summed for each data base. The most heavily used single data base is *Chemical Abstracts*, followed closely by the *Science Abstracts* data bases. If the three *Science Abstracts* data bases are counted as one, it would be

the most widely used, followed by Chemical Abstracts. Other important data bases are NTIS, Engineering Index, and Abstracted Business Information. In an earlier study made of 139 literature searches (14), it was found that four data bases accounted for half of the uses. Three of those four are the same as in this study. The other data base is Science Citation Index. Its apparently low on-line usage is undoubtedly due to the fact that it did not come on-line until October 1975, so that it was not available all year. Extrapolating its three-months cost to an entire year would put it well up on the list.

<sup>\*\*</sup>Not including TYMSHARE.

Table 5. Ranking of Data Bases by "Weighted Usage" (See Text)

Rank*	Date Base**		
1	CA		
2	SAB-C		
3	SAA		
4	NTIS		
5	El		
6	ABI		
7	Tox		
8	SCI		
9	Psych		
10	F&S		
11	CA7071		
12	Biol		
13	Stat*		
14	ERIC		
15	SSCI		
16	ISMEC		
17	Meteor		
18	Claims		
19	Georef		
20	Pollut		
21	Ocean		
22	Libcon		
23	NAL		
24	CIS		
25	Found		
26	EIS		
27	EMA		

<sup>•</sup> in decreasing order of usage.

Table 6. Searches Having Multiple Sessions (Total of 502 Sessions)

	Subject		
No. of	Searches v	with S Sessions	
Sessions, S	No.	Percent	
1	145	57	
2	61	25	
3	17	5	
4	11	5	
5	10	4	
6	4	1	
7	1	0.4	
8	1	0.4	
9	1	0.4	
16	1	0.4	
26	1	0.4	
Total	253	100	

Since different data bases and vendors charge widely varying rates (Table 2), comparison of usage strictly on the basis of cost favors those data bases which have lower rates than others. In order to offset this and to treat all data bases equally, they were ranked by "weighted usage". The effective usage of a data base was defined to be the total number of minutes of connect time plus 10% of the total number of off-line prints (suggested by the \$1.00/minute, 10¢/print average cost). Usage values for data bases which were available for only part of the year were linearly extrapolated to a full year, based on the number of months the data base was actually on-line. Table 5 shows the resulting ranking, in decreasing order of "weighted average". Again, it must be emphasized that this ranking is probably peculiar to Bell Laboratories.

### **Searches and Sessions**

Of 604 sessions recorded in 1975, 43 were author searches, 39 were demonstrations, and 20 were tests, leaving 502 sessions on a specific subject. These 502 sessions were on 253 subjects, for an average of almost exactly two sessions per search. Table 6 shows that 145 (57%) of the searches had 1 session, 61 (25%) had two sessions, and so on. Of the total, 82% of the searches had either one or two sessions. This figure is somewhat higher than the earlier survey (14), which found that 45% of the searches use one data base, and 23% used two—a total of 68%.

Some sessions extended over several data bases. In the on-line mode of searching, multiple data bases are rapidly and easily used. A search can conveniently cover a variety of data bases, some of which may not be available to the searcher in hard copy. For example, an astonishing total of 26 sessions were used in one broad and interdisciplinary search on statistical graphics.

### **Effect on Library Services**

On-line searching has a significant effect on library services, particularly interlibrary loans. This is especially true in a library such as Bell Laboratories', which

<sup>\*\*</sup>Full names are shown in Table 2.

has an in-depth collection on some subjects, and minimal or no holdings in others. It was found that interlibrary loan requests increased from 1.309 in 1974 to 2,109 in 1975—an increase of 67%. Many of these requests were directly traceable to a few large on-line searches performed on subjects of growing interest at Bell Laboratories. This experience considerably different from that of Hitchingham (10), who reports only a small increase in interlibrary loan requests following the installation of an on-line system. Users' location and habits undoubtedly account for this. As Hitchingham points out, convenient access to a large university library was a major factor in her case. The practice of most Bell Laboratories staff members seems to be to obtain needed materials through interlibrary loan, rather than in person at nearby institutions.

### Conclusion

Many of the papers cited extol the virtues of the publicly available on-line searching systems. Some of these virtues follow.

- 1) Completeness. A computer can quickly and accurately process a large volume of information. It does not get tired. On-line searching is "exhaustive but not exhausting" (15).
- 2) Resource expansion. One can search data bases to which the library does not subscribe in hard copy. In this way, its resources are greatly expanded.
- 3) Cost. The experiences for 1975, reported here, show that on-line searching is rapid and is available at a relatively modest cost.
- 4) Speed. Results of a search are available immediately at the terminal if desired. Off-line prints are easily ordered and usually arrive promptly.
- 5) Printed output. Off-line output is well formatted and can be given directly to the requester. Little or no further clerical effort needs to be expended on it.
- 6) Boolean combinations. There is no limitation on term combination. Many searches easily done on-line would be difficult or impossible to do manually.

7) Productivity. An on-line system can accomplish in a few minutes what would take several hours or more to do by manual methods. It therefore greatly increases searcher productivity.

With such an impressive array of powerful attributes, it is little wonder that on-line systems have had a large impact on the productivity of literature searching services. The future of these systems in our environment is predictably bright.

### Acknowledgment

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### The Foundation Center

### Judith B. Margolin

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■ The Foundation Center is a sophisticated information system utilizing computer and microform technologies as well as traditional publications and library services. A flexible program of publications serves to translate and make available facts and figures received each year from the Internal Revenue Service and from foundations. A wide range of

services is offered to satisfy the Center's diverse clientele. A simple guide has been printed to combat the public's unfamiliarity with foundation information resources. Solutions adopted by the Center to mitigate serious problems in information management are offered to aid others in the field of information science.

THE Foundation Center is dedicated to the collection and dissemination of information on philanthropic foundations and their grants. The Center is an independent nonprofit organization supported by grants from more than 150 foundations. The Center takes no position of advocacy. Of major concern is the provision of useful factual data on foundations. The traditional clientele of the Center has been the fund-seeking public. However, the Center also serves interested individuals and representatives of many different institutions. In recent years, in particular, the Center has been active in providing information about foundations to foundations in order to help clarify a little understood and much misrepresented field.

Over a period of approximately five years the Foundation Center has been transformed from a small, rather specialized library and the publisher of *The Foundation Directory* to a sophisticated information system, the principal such organization in the foundation field. The Center has faced and continues to face serious problems in information manage-

ment. While the body of knowledge concerning foundations is in some ways unique, the solutions arrived at and vehicles for dissemination adopted by the Center are not. They have potential applications to other library situations, and thus are of interest to special librarians.

A major factor in the information problems confronting the Center is the difficulty acquiring and managing information on foundations. Foundation philanthropy is not a clearly defined discipline, and bibliographic control in this area is scant. A librarian attempting to collect printed materials on foundations must have access to a great many sources and must search under a wide variety of subject headings and keywords. More citations are discovered by scanning publishers' circulars, fliers, newsletters and house organs of other nonprofit organizations than by the traditional bibliographic search through monographic and periodical indexes and the reviewing media.

The major provider of factual information on foundations is the Internal

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Revenue Service. The IRS gathers information regarding foundation compliance with the tax laws. Of secondary importance to the IRS is the provision of this information to the public. Moreover, the type of information requested from foundations by the IRS in order to monitor their activities does not always coincide with the information needs of the public. The typical user requires answers to specific questions about the grant-making activities of foundations, and this information may not be readily available by studying the IRS records. The Foundation Center finds itself at the heart of the conflict between limitations on the type and content of the information the IRS is able to provide and the public's need to know. The Center's difficult mission is to translate IRS data into a useful and usable information resource.

An alternative to information obtained from the IRS is information solicited directly from foundations by the Foundation Center. However, the majority of the nation's 26,000 private foundations are small, with no full-time staff, administered by a trustee to whom responding to the Center's questions may be an unwelcome burden. In addition, some of the larger foundations whose administrators might be expected to be better able to respond have shown themselves loath to do so because of a long tradition of reticence. The prevailing fear voiced by foundation executives is of being inundated by a flood of requests for grants which fall outside the scope of their funding programs.

Happily, this attitude among foundation executives is slowly beginning to change. In recent years they have been inclined to cooperate with the Center since it has been demonstrated that the more accurate and complete the information provided on a foundation's activities, the fewer inappropriate grant requests will be received.

The difficulties surrounding the nature and format of the information made available by the IRS are more complicated and less amenable to ready solutions. At present the IRS films the annual information returns filed by private foundations and makes them available in the form of aperture cards. For each foundation there are at least two cards, and for the larger foundations there are many more than two. These cards are the primary resource available to the public on foundations. Unfortunately, members of the public experience some difficulties retrieving information they require because of reluctance to use microforms and lack of familiarity with how to read the IRS forms. Furthermore, there is a substantial time lag between the date foundations file their returns and the date IRS actually makes aperture cards available.

### A Flexible Program of Publications

A major goal of the publications program of the Foundation Center is overcoming these barriers to current, accurate, and useful information on foundations. To do this the center has adopted flexibility as the keynote of its program of publications. The Center attempts to make the best use of that information currently available, translate it into a form readily accessible to the user, and, above all, get the information to the public.

Published information on foundations falls into three categories. First, there is the Center's *National Databank* containing brief descriptions of all 26,000 private foundations, culled from IRS sources. These descriptions serve as indicators of which foundations would merit further research.

Second, there is *The Foundation Directory*, a reference work which contains basic profiles of the large 2,533 foundations. Criteria for inclusion in the fifth edition (1975) of the *Directory* were assets of \$1 million or more and/or total grants of \$500,000 or more. Whenever possible, the

Figure 1. Foundation Center Library.



information is ascertained directly from the foundations themselves. Otherwise, the IRS sources are used.

Finally, there is a two-volume publication, The Foundation Center Sourcebook. The Sourcebook contains original source materials which describe in detail the policies, programs, and application procedures as well as extensive grants lists for 227 of the largest foundations. Criteria for inclusion in the Sourcebook were assets of greater than \$7 million and regional or national giving patterns. These listings are gleaned from annual reports, printed leaflets, and other foundation sources. The three-pronged approach to foundation information is based on the assumption that more users are interested in the larger foundations with national rather than local programs.

Information on foundation grants is published in different formats and arrangements. All such grants listings are derived from reports made directly to the Center by foundations. Current lists entitled *The Foundation Grants Index* are a regular feature of the journal *Foundation News*, published by the Council on Foundations, Inc.\* In addition to an al-

phabetical arrangement by state and foundation name, the bimonthly issues include indexes of key words and phrases and of recipient names. Annual volumes of the Grants Index are also published which cumulate six issues from the bimonthly journal. The Center has adopted the technique of publication via computer output microfiche in The Foundation Grants Index: Subjects. These listings include many of the same grants from the published Grants Index but the arrangement is by subject category, permitting a quick overview of foundation support in a particular field of endeavor. Finally, special listings of grants in defined subject fields, geographic areas, or of specified size and type are made available to Associates of the Center and to foundations by means of a custom computer search service.

All of the Center's published information is stored in computerized data banks. Thus it is available for frequent update, custom searching, and statistical manipulation. The data banks are of special interest to librarians for several reasons. They might prove useful in a search for library funding or for funding for other nonprofit organizations with which a librarian may be concerned. Furthermore. under an agreement with the Lockheed DIALOG Information Retrieval System, the Center's Directory and Grants Index data banks are available for on-line interactive computer searching from any of the more than 1,000 terminals that currently have access to DIALOG.

### **Serving Many Masters**

The Foundation Center must serve many different user groups simultaneously. These users cover a broad spectrum from one-time library visitors to foundation executives to professional fund raisers. In order to respond to the diversified needs of its users, the Center must offer a wide range of services. For the general public the Center's library staff in New York and Washington, D.C., attempt to provide individualized library service to insure that service is geared to each patron's own level of sophistication in the use of foundation research tools.

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<sup>\*</sup>The Council on Foundations, Inc., is a nonprofit membership organization which provides a range of advisory and consulting services for its member foundations. The council and the center share quarters in the same building and cooperate fully with one another. However, they are two separate institutions.

Persons outside the New York and Washington, D.C., areas also require foundation information over and above what is available in their local libraries. The Center has attempted to decentralize available information resources on foundations by means of a network of cooperating collections. At present there are cooperating collections at 53 public, academic, and foundation libraries throughout the country. The Center provides copies of all its publications, IRS records for foundations in appropriate states, and advice concerning the use of materials. In return, each cooperating library assigns a staff member responsibility for the collection, agrees to maintain the collection, and promises to make the information available to all patrons. The network of cooperating collections represents a major step toward nationwide dissemination of information on foundations, since the same resources are available at each location. Librarians responsible for these collections are beginning to communicate and to share resources among themselves. Patrons using these collections are reminded that services offered vary according to funds and staff time available at each individual library.

### **Specialized Services**

There are a number of nonprofit organizations, professional fund raisers, and others who use foundation information resources and require more specialized services than the typical library visitor. For these frequent users the Foundation Center offers an Associates Program whereby payment of an annual fee entitles Associates to receive special services, including telephone reference, photocopies by mail, custom computer searches, and library research performed by the Center's staff.

The introduction of the Associates program in January 1975 raised a serious question concerning interference with free access to information traditionally supplied by the Foundation Center. However, after some examination of this question it was determined that the Associates

program does not present obstacles to free access. Associates are charged for special services, not for the actual information, which continues to be available to anyone willing to perform his or her own research. The Associates Program is generally considered to be a success. There are approximately 500 Associates of whom 75% are resubscribers. The staff of the Foundation Center points to a truly special relationship they have established with many Associates and to valuable opportunities for user feedback as advantages of this program.

In addition to Associates, the Foundation Center has a special clientele in the foundation world. Unfortunately, in the past many foundations, even those supporting the Center, viewed it mainly as a resource for the fund-seeking public. Information needs of foundations differ markedly from those of the public; it required some prodding on the part of Center staff before foundation executives became convinced that the Center could provide useful information for them too. For several years there was an ongoing process of reeducation as the Center attempted to combat a long history of secrecy and suspicion among foundations regarding the provision of information. Nevertheless, the staff of the Foundation Center persevered because charting the foundation field by providing useful facts and figures to help foundations better understand themselves is considered to be one of the Center's major responsibilities.

At present the Center offers the same special services to foundations that Associates receive. Foundations which do not provide substantial financial support for the Center are billed at the same rates as Associates but not required to pay the annual fee. Those who are supporters usually are not charged for special services. This arrangement has proved quite workable, and Center staff report information requests from foundations to be on the increase.

### A Simple Printed Guide and Its Uses

A third problem encountered by the Foundation Center is a lack of awareness on the part of the public concerning foun-

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dations. There has been a general unfamiliarity with resources available and a great misunderstanding regarding foundations and how they operate. As one solution to this problem the Center has printed a simple guide entitled About Foundations. This guide serves as an orientation tool which library staff may offer visitors as soon as they arrive. For those who purchase it in advance, it acquaints users with resources prior to their visit. In addition, it suggests ways in which members of the public might use their own local libraries to find answers to their questions on foundations. Finally, this guide aids librarians out in the field and especially at the Center's cooperating collections to become more familiar with specialized tools.

Such a guide must combat public resistance to written instruction. Of course, it does not replace personal contact with library staff. It simply aids the user to pose more informed questions. The guide must be general enough so as not to require too frequent revision while still providing specific suggestions on the proper use of the library's resources.

About Foundations attempts to answer questions posed most frequently by library visitors and to correct the most commonly shared misconceptions about foundations. The guide is written in simple language with many illustrations. It includes a glossary which provides definitions for both foundation-related and information science-related terms. To date several thousand copies have been sold and an even greater number have been given away to nonprofit organizations sponsoring conferences on foundations and fund raising. User response has been quite favorable.

In conclusion, it is evident that the Foundation Center has faced and continues to confront a difficult information universe both in terms of the information resources available and the public's need to use the information wisely. The Center attempts to improve upon the information universe while simultaneously taking the pragmatic approach that the best use should be made of the facts which actually are at hand. To accomplish its goals the Center considers who are its

users and directs services and publications to that audience.

The Foundation Center is an unusual information system making use of microform and computer technologies as well as traditional publications and library services. However, the information problems encountered by the Center are not unique. It is hoped that some of the solutions adopted by the Center and described here will prove useful to others in the field of information science who, on a daily basis, tackle similar problems in the successful management of information.

### Sources of Information

 Lewis, Marianna O., Ed. / The Foundation Directory, Edition 5. Introduction by Thomas R. Buckman. 540 p., 15 tables, 4 semiannual supplements. \$30.00

The Foundation Directory is the most important single reference work available on grant-making foundations in the United States. Edition 5 includes information on the 2,533 largest foundations. These foundations account for about 90% of all foundation assets and 80% of all grants made in this country. Each entry includes the foundation address, date of founding, donors, officers and directors, a brief summary of financial information, and a statement of purpose and activities.

 Beck, Terry-Diane and Alexis Teitz Gersumky, Eds. / The Foundation Center Source Book, vols. 1 and 2, 1975/1976, 2350 p. \$65.00/volume.

This publication brings together all of the most relevant information on 227 of the largest U.S. foundations with national or regional giving patterns and assets generally greater than \$7 million. The authorative profiles of each foundation provide the user with a comprehensive and up-to-date picture of each foundation's activities.

3. "The Foundation Grants Index." Bimonthly. Included as a separate section in Foundation News. New York, Council on Foundations, Inc. \$20.00/yr.

A current awareness tool detailing currently reported foundation grants of \$5,000 or more with recipient and keyword subject indices. Each listing includes recipient name and geographic location, amount and date of grant, and grant purpose, if available. An average bimonthly index lists more than 1,600 grant awards, totaling about \$100 million.

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4. Noe, Lee, Grants Ed. / The Foundation Grants Index. New York, Columbia University Press. Annual. \$15.00.

Annual cumulation of the grant information and indices appearing in Foundation News. Includes detailed summaries of about 10,000 grants made by approximately 300 major foundations with a total value exceeding \$700 million. While not comprehensive, it is useful in its representative reporting of current grants by large, national foundations, providing a valuable approach to their current interests.

5. The Foundation Grants Index: Subjects on Microfiche. New York, The Foundation Center. Annual. \$3.00/card.

Grant information from the annual volume rearranged by frequently requested broad subject areas on convenient microfiche cards. Each card includes grant records in one subject field, plus an alphabetical index to the foundations that have made grants in that field. Hundreds of grants are listed on each card, with most fields covered in 1-2 cards.

6. Margolin, Judith B. / About Foundations: How to Find the Facts You Need to Get a Grant. New York, The Foundation Center. \$2.00

Published in September 1975, this paperback booklet is intended to serve as a guide to doing foundation funding research. It includes step-by-step instructions for users who need information on a specific foundation, want the names of foundations in a certain geographic area, or are developing a list of foundations interested in funding projects in specific subject areas. Explicit directions are given for the most efficient and thorough usage of standard foundation reference tools such as foundation annual reports and IRS information returns. Printed and microfiche sources of information are identified and illustrated with excerpts from the actual materials.

7. Foundation Annual Reports on Microfiche.

New York, The Foundation Center. Quarterly, \$2.00/card.

The Foundation Center reproduces the published annual reports of approximately 350 foundations on microfiche for easy storage and retrieval. They are available in chronological series or individually by foundation name. Each series includes the reports received by the center in that quarter. Historical reports are also available.

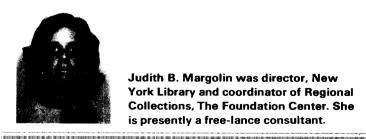
8. Guide to Foundation Annual Reports. New York, The Foundation Center, Annual.

Serves as an index to the foundation annual reports available on microfiche. It also is useful as a guide to the foundations which issue separate annual reports that are publicly available. The address is included for each foundation, and the frequency with which the foundation issues reports is noted. An introduction detailing the uses and value of foundation annual reports to the grant seeker is also included.

9. Jacquette, Lee F., and Barbara L. Jacquette / What Makes a Good Proposal? 8 p; Mayer, Robert A. / What Will a Foundation Look for When You Submit a Grant Proposal? 8 p; Andrews, Emerson F. / Philanthropy in the United States: History and Structure. 48 p. with bibliography.

These useful booklets on philanthropy and proposal writing are available from The Foundation Center free of charge for up to five copies apiece. For six or more copies prepayment of \$.10 each is requested for the Mayer and Jacquette proposal writing guides and \$.50 each for the Andrews publication, plus \$1.00 postage and handling for each order.

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Judith B. Margolin was director, New York Library and coordinator of Regional Collections, The Foundation Center. She is presently a free-lance consultant.

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# Evaluation of ORBIT and DIALOG Using Six Data Bases

### **Irvin Weiss**

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■ Little information exists regarding the comparison of ORBIT and DIALOG. This is an attempt to document a comparison of several major and minor aspects of each system, such as data base costs, searcher keystrokes, and time

availability of data bases. Much of the data was obtained from computer printouts of the two respective systems. It is hoped that this information may assist in the evaluation of whether to acquire one or both of the systems.

A COMPARISON of those data bases that are identical in both the ORBIT system (System Development Corporation or SDC) and the DIALOG system (Lockheed Information Service or LIS) and that are used for on-line search and retrieval are provided. In so doing, this comparison should result in a ranked list of pros and cons. This list may then form the basis for developing management decisions about the future use of the six data bases for organizations that either use or contemplate using them. The data bases include: CHEMCON, ERIC, CAIN, INFORM, NTIS, COMPENDEX.

### Methodology

One of the basic tasks was to derive an approach that would yield as many indisputable results as possible. The most demonstrable approach that could satisfy this undertaking was to retrieve and print the stored descriptive information from the particular system for such information

Irvin Weiss was a graduate student at the University of Maryland Library School.

as: data elements per data base; costs per data base; and command definitions. (So long as these data were kept in proper perspective, they must be incontrovertible.) The author used a Hazeltine 2000 terminal with printer to obtain much of this information.

Table 1 presents information about SDC and LIS and their search and retrieval services, e.g., their location, membership requirement, terminals used, training, documentation, network costs, and total on-line data bases. The section on the "Comparison of the Six Data Bases" compares the manner of usage by both systems for each data base. (1)

The section on "System Commands, Search Use, and Keystrokes" compares on-line commands that are used to process the data bases under examination. Commands will be grouped according to function, and then further explicated according to the definitions provided from on-line prints by each system. An evaluation of identical or closely related demand searches that were performed on the six data bases for each of the two systems is included.

Table 1. General Information

Considerations	erations SDC LIS		
Location	SDC Search Service 2500 Colorado Avenue Santa Monica, CA 90406 (213) 829-7511 (2) or SDC Search Service 5827 Columbia Pike Falls Church, VA 22041 (703) 790-9850 (2)	Lockheed Information Systems 3251 Hanover Street Palo Alto, CA 94304 (415) 493-4411 4275 (3)	
Membership Requirement	No minimums or subscription charges (4)	No minimums or subscription charges (1)	
Terminals Used	Teletype 33, 35, 37, 38; Computer Devices 1010, 1030; Execuport 300 series; Texas Instruments 700 models; Data Products PortaCom; TermiNet 300; IBM 2741; ASCISCOPE; Memorex 1240 (5); Hazeltine 2000	Anderson Jacobson 630; Computer Devices CDI 1030; Computer Transceiver Execuport 300; Data 100 73; Datapoint 2200, 3000, 3300; General Electric TermiNet 30, 300; Hazeltine 2000; IBM 2740/2741; Imlac PDS-1; Infoton Vista Standard, Vistar Display; Memorex MRX 1240; Research Inc. Teleray 3300; Tektronix 4010, 4013, 4023; Teletype 33, 35, 37, 40, Inktronics; Texas Instruments 725, 733, 735; Univac DCT 500; Video Systems 1200, 5000 (6)	
Training	Up to 2 free hours of computer time during first 30 days of service for new users (4)	Training credit of 2 hours search service time will be allowed all customers (1)	
Documentation	\$15 for the basic manual; \$5 for all supplements (4)	One copy of the users manual at \$10 covers all data bases (1)	
Network Costs	TYMSHARE (Optional) \$10/hr plus telephone charges (2) or TELENET (Optional) \$10/hr plus telephone charges (2)	TYMSHARE (Optional) \$10/hr plus telephone charges (7)  TELENET (Optional) \$8/hr plus telephone charges (7)	
Total Online Data Bases	ERIC, CHEMCON, COMPENDEX, GEO-REF, NTIS, INFORM, POLLUTION, SSIE, CAIN, CIS, ASI, P/E NEWS, RINGDOC, CHEM7071, APILIT, APIPAT, CIN, LIBCON/E, LIBCON/F, TULSA, WPI (2)	ERIC, CHEMABS, CEC, BIOSIS PREVIEWS, NTIS, SOC SCISEARCH, COMPENDEX, AIM/ARM, CAIN, PSYCH ABS, INSPEC-PHYSICS, INSPEC-ELEC/COMP, ISMEC, INFORM, CMA&EMA, PTS WEEKLY, F&S, CIN, DOM STAT, FRN STAT, EIS, CLAIMS/CHEM, CLAIMS/GEM, FDN DIRECTORY, FDN GRANTS, OCEANIC ABS, METEOR/GEO ABS, METADEX, WORLD ALUMINUM, SCISEARCH, DISSERTATIONS (obtained from DIALOG computer listing)	

The section on "Summary and Conclusions" is a summarization of the paper with recommendations.

### Comparison of the Six Data Bases

The following criteria use the six data bases as constants to compare the two systems in Tables 2 through 7: a) Daily hours available—the availability of each data base for on-line search and retrieval;

b) Coverage—the earliest date for which the information is represented in the data base; c) File update—how often new information is added to the data base (Where available, some indication is provided regarding the quantity that is included in these updates); d) File size—the size of the data base per reference used; e) Data elements—the fields that are used in the data bases (The number and kind of data element will vary by data base and by

Criteria	SDC SDC	LIS
Hours Accessible Per Week	Tue thru Fri: 8:30 am to 2 pm — 22.00 Mon thru Fri: 2:10 pm to 5 pm—14.10 5:10 pm to 8 pm—14.10	Mon: 8 am to 8 pm —12.00 Tue & Fri: 3:30 am to 7 pm —31.00 Wed & Fri: 3:30 am to 8 pm—33.00
	(8) 50.20	Sat: 9 am to 12 noon — 3.00
	16/ 30.20	(10) 79.00
Coverage From Yr. Of Entry	January 1970 <i>(2)</i>	January 1972 (9)
File Update & Frequency	13,000 records added biweekly (9)	26,000 records added monthly (9)
File Size	988,000 records (9)	1,000,000 records <i>(9)</i>
Cost	Computer-connect hourly rate: \$60 (2) Offline printing/Citation: \$.12 (2)	Rate/Hr: \$45 Print Formats: FMT5, \$.08; FMT2, \$.08 (Cost figures obtained from DIALOG computer listing)
Data Elements	(Because of their large volume, they are not in	ncluded)
Table 3. ERIC Criteria	SDC	LIS
Hours Accessible Per Week	Tue thru Fri: 8:30 am to 2 pm —22.00 Mon thru Fri: 5:10 pm to 8 pm—14.10	Mon: 8 am to 8 pm —12.00 Tue & Fri: 3:30 am to 7 pm —31.00
	(8) 36.10	Wed & Thu: 3:30 am to 8 pm—33.00 Sat: 9 am to 12 noon — 3.00
		(10) 79.00
Coverage From Yr. Of Entry	January 1966 <i>(2)</i>	January 1966 <i>(9)</i>
File Update & Frequency	2,500 records monthly (9)	2,500 records monthly (9)
File Size	192,000 records <i>(9)</i>	220,000 records (9)
Cost	Computer-Connect Hourly Rate: \$35 (2) Offline Printing per Citation: \$.08 (2)	Rate/Hr: \$25 Print Formats: FMT5, \$.10; FMT2, \$.05 (Cost figures obtained from DIALOG computer listing)
Data Elements	(Because of their large volume, they are not in	ncluded)
Table 4. CAIN		
Criteria	SDC	LIS
Hours Accessible Per Week	Mon thru Fri: 2:10 pm to 5 pm—14.10 (8)	Mon: 8 am to 8 pm
Coverage From Yr. Of Entry	January 1970 (2)	(10) 79.00 January 1970 <i>(9)</i>
File Update & Frequency	12,000 records monthly (9)	12.000 records monthly (9)
ile Size	605,000 records (9)	675,000 records (9)
Cost	Computer-Connect Hourly Rate: \$35 (2) Offline printing per citation: \$.06 (2)	Rate/Hr: \$25 Print Formats: FMT5, \$.05; FMT2, \$.05 (Cost figures obtained from DIALOG computer listing)
Data elements	(Because of their large volume, they are not in	ncluded)
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### Table 5. INFORM

Criteria	SDC	LIS
Hours Accessible Per Week	Tue thru Fri: 8:30 am to 2 pm —22.00  Mon thru Fri: 2:10 pm to 5 pm—14.10  5:10 pm to 8 pm—14.10  (8)  50.20	Mon: 8 am to 8 pm —12.00 Tue & Fri: 3:30 am to 7 pm —31.00 Wed & Thu: 3:30 am to 8 pm—33.00 Sat: 9 am to 12 noon — 3.00
	(8) 50.20	79.00
Coverage from Yr. Of Entry	August 1971 (2)	August 1971 <i>(9)</i>
File Update & Frequency	900 records monthly (9)	900 records monthly (9)
File Size	23,000 records (9)	27,000 records (9)
Cost	Computer-connect hourly rate: \$65 (2) Offline printing per citation: \$.10 (2)	Rate/Hr: \$65 Print Formats: FMT5, \$.10; FMT2, \$.05 (Cost figures obtained from DIALOG computer listing)
Data Elements	(Because of their large volume, they are not i	included)
Table 6. NTIS Criteria	SDC	LIS
Hours Accessible Per Week	Tue thru Fri: 8:30 am to 2 pm —-22.00 Mon thru Fri: 2:10 pm to 5 pm—-14.10 5:10 pm to 8 pm—-14.10	Mon: 8 am to 8 pm
	(8) 50.20	Sat: 9 am to 12 noon — 3.00
		(10) 79.00
Coverage From Yr. Of Entry	January 1970 (2)	January 1964 <i>(9)</i>
File Update & Frequency	2,300 records biweekly (9)	2,300 records biweekly (9)
File Size	265,000 records (9)	475,000 records (9)
Cost	Computer-connect hourly rate: \$45 (2) Offline printing per citation: \$.08 (2)	Rate/Hr: \$35 Print Formats: FMT5, \$.10; FMT2, \$.05 (Cost figures obtained from DIALOG computer listing)
Data Elements	(Because of their large volume, they are not i	ncluded)
Table 7. COMPE	NDEX	
Criteria	SDC	LIS
Hours Accessible Per Week	Tue thru Fri: 8:30 am to 2 pm —22.00 Mon thru Fri: 5:10 pm to 8 pm—14.10	Mon: 8 am to 8 pm —12.00 Tue & Fri: 3:30 am to 7 pm —31.00
	(8) 36.10	Wed & Thu: 3:30 am to 8 pm—33.00 Sat: 9 am to 12 noon
Coverage From Yr. Of Entry	January 1970 <i>(2)</i>	<i>(10)</i> 79.00 January 1970 <i>(9)</i>
File Update & Frequency	6,000 records monthly (9)	6,000 records monthly (9)
File Size	358,000 records (9)	394,000 records (9)
Cost	Computer-connect hourly rate: \$65 (2) Offline printing per citation: \$.10 (2)	Rate/Hr: \$65 Print formats: FMT5, \$.10; FMT2, \$.05 (Cost figures obtained from DIALOG computer listing)
Data Elements	(Because of their large volume, they are not i	
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Table 8. Differences in Access Time, Connect Time, and Offline Print d = (LIS) – (SDC)

Data Bases	Difference in Access Hours*	Difference in Connect- Time Cost	Difference in Offline Print Cost	
CHEMCON	28 hrs & 40 min	\$15	\$.04	
ERIC	42 hrs & 50 min	10	• •	
CAIN	64 hrs & 50 min	10	\$.01	
INFORM	28 hrs & 40 min	0	• •	
NTIS	28 hrs & 40 min	10	• •	
COMPENDEX	42 hrs & 50 min	0	* *	

<sup>\*</sup> Per Week

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system); f) Cost—the dollar amount charged for the use of the data base, including connect time and offline printing. Computer connect time is the cost for each hour that the user has his terminal connected on-line to the computer at the company's facility. Off-line printing is the cost per citation to have the user's retrieval printed at the company's facility and mailed to the user within 24 hours. (1)

LIS offers 79 hours of access time per week (including Saturdays) for all data bases. The number of hours provided by SDC for each of the six data bases varies.

The "Explain" command was used in both systems to note the data elements found in each of the six data bases. As a general observation, the SDC printout of data elements are far more detailed and descriptive than is its LIS counterpart, though the latter does provide examples of its listed data elements while SDC does not.

Table 8 distinguishes the differences between the two systems regarding availability of access hours, cost variances in hourly computer connect time, and off-line printing per citation as noted in Tables 2 through 7. It becomes apparent that these differences favor LIS.

## System Commands, Search Use, & Keystrokes

Appendix 1 notes the names of commands for both systems grouped according to function. Though much of this data was obtained from "A Quick Users Guide for Bibliographic Search Systems," a portion of the data and functions are new (e.g., command abbreviations and several new commands were added). Also, definitions from on-line prints for both systems are in the command definition list. The command definitions further elaborate upon the command process and their capabilities. Because of the list's length, however, it is not included in this paper.

Definitions were not available for three ORBIT commands (i.e., TIME, TIME INTERVAL and TIME RESET) and one DIALOG command (i.e., LOGOFF). The ORBIT repertoire has 24 commands; there are 16 DIALOG commands.

A simple search was done for each of the six data bases in each of the two systems. The search terms used have no significance in themselves except to reveal to the reader the manner in which some functionally related commands are used to process similar or identical data; an additional purpose was to acquire a better appreciation of the quantity of key stroking required even for the simple searches represented here. Because of their printout length, the retrievals are not included in this paper.

In the six data bases, the terms automation and system or automation and librar were enlarged upon in an attempt to obtain related terms. Under this procedure, with the NEIGHBOR command (ORBIT), initially, five terms were always displayed, though up to ten additional terms can be displayed subsequentially in either direction. It appears that the first display of five terms is not sufficient to perform the function for which it was intended.

The EXPAND command (DIALOG) is programmed to display either 20 terms or 20 lines of data, whichever occurs first. This number of displayed terms appears to be better suited to the task at hand.

The commands FIND (ORBIT) and SELECT (DIAGLOG) were then used to extract the desired terms. Here too, the SELECT command, which can extract one, several, or all terms by designating only the brief contents of the "REF" column, appears to do more processing than the FIND command.

<sup>\* \*</sup> Depends on the print format used in DIALOG

Table 9. Keystroke Comparisons

Commands or Functions That	Keystro	kes for
Specify a particular data base	11	7
Display alphabetical list of terms	6	1
Enter search terms	16**	4**
Create search logic for the following:		
AND	7	4
OR	6	4
AND NOT	11	4

<sup>\*</sup>The downshift key was not counted as a separate stroke

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The results of either operation are then combined in both systems, afterwhich some of the citations were printed on-line in order to present the capabilities of the PRINT instruction in both systems. Flexibility in printing appears to be one of the cornerstones of the ORBIT system; it appears to be superior to the nine print formats that were offered in DIALOG. Three of the formats in the latter system often duplicate each other or other formats (depending upon the data base used). There is no alerting mechanism in the DIALOG print command definition as to when or how the formats should be used. The ORBIT PRINT formats are also easier to view because the data are "strung out" as opposed to the DIALOG format which is collapsed into paragraph

With regard to key-stroking commands, in order to specify a data base in the ORBIT system, the user keys ten characters and one space stroke for "FILE ERIC." To do the same in DIALOG, three character strokes are used for !04. To NEIGHBOR the term automation, five characters and one space stroke are used for "NBR EXPAND the same term in DIALOG. one stroke is used, i.e., FIND the term in ORBIT, sixteen strokes are used to "FD AUTOMATION:"; to SELECT the same term in DIALOG, four strokes are used, i.e., "E5?. Even at the point of combining sets in ORBIT, to perform an AND, five characters and two space strokes are used, as in 1 AND 2; to perform an OR, four characters and two

space strokes are used, as in I OR 2; in an AND NOT, eight characters and three space strokes are used, as in I AND NOT 2. Applying the same comparisons in DIALOG, the following number of key strokes are used: AND is expressed as "I\*2—equal to four strokes; OR is expressed as "I+2—equal to four strokes; AND NOT is expressed as "I-2—equal to four strokes. These key stroking data are summarized in Table 9

#### **Summary and Conclusions**

The data that have been assembled in this paper reveal that there is much overlap in the types of terminals that may be used in both systems. TELENET is more expensive to use with ORBIT than with DIALOG. A significant result for DIALOG is the overwhelming difference in "time availability" of the six data bases when contrasted with ORBIT.

Another important result is the savings in connect-time-cost for four of the six data bases in DIALOG when contrasted with ORBIT. Differences in off-line printing costs will vary, based on the format used. The printing format flexibility offered in ORBIT greatly over-shadows the print capability of DIALOG. The computer-printed documentation offered as assistance to the user is better developed in ORBIT. The savings in keystrokes by an experienced searcher is a substantial consideration that appears to weigh heavily in favor of DIALOG.

Armed with these conclusions, the reader's first step should be an attempt to weigh each evaluation, based on the needs of his organization. The result of this procedure is a list of pros and cons that may from the basis for promulgating management decisions about the future use of the six data bases for the particular organization. As a result, in the system evaluated as "second best," should the data bases be used at all? Should they be used only in the event that the system designated as "superior" is not operational? As noted in Table 1, there are no membership requirements for any of the six data bases. Consequently, the author would argue against the implementation of

<sup>\*\*</sup>To find the term AUTOMATION

the first alternative. The second alternative certainly merits some attention for those organizations having access to both systems. However, for those organizations which have limited resources and/or are seriously considering the merits of either system, the alternative is obvious.

For those users who believe that additional information is necessary in order to determine the value of either system, another criteria could be investigated, i.e., to compare searching techniques in each system for the six data bases and their turn-around-times for on-line and off-line prints. With these additional data, further alternatives may be developed with a recommendation of one for use.

#### Acknowledgments

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Appendix 1.

ORBIT & DIALOG Online Command Differences (12)

FUNCTIONS	ORBIT	DIALOG
Housekeeping		
Start search after login	Directly connected	BEGIN or !; ! (insert file #); .FILE (insert file #)
Terminating a search&/or disconnecting from system	"STOP"	END or LOGOFF
Ask for list of data bases	"FILES?"	?FILES; BEGIN or !
Determining elapsed time	"TIME"; "TIME INTERVAL"; "TIME RESET"	Not applicable; included in END command
Deleting search state- ments no longer needed	"ERASEBACK" or "ERSBK"; "BACKUP"; "RESTACK" or "RSTK"; "ERASEALL" or "ERSLL"; "RESTART" or "RST"	Not applicable
Program adjustment	"RENAME" or "RNM"	Not applicable
Searching		
Entering search terms	Enter words (always in search mode: can search on single terms or multiple term concept)	SELECT or # (simple form can search one word, multiple term concept or term(s) from EXPAND display)

FUNCTIONS	ORBIT	DIALOG			
	"FIND ————" or "FD" (used for bypassing program's queries)	Not applicable			
Displaying an alphabetical list of terms	"NEIGHBOR ————" or "NBR" (display 5 terms when first used; then displays up to 10 terms; can go forward or backward thru index)	EXPAND or " (displays 20 lines & shows existence of related terms in a thesaurus)			
Creating search logic	Always in search mode; insert AND, OR, and AND NOT in any search statement	COMBINE or \$ (must use set numbers with AND or *, OR or and AND NOT or logical operators)			
Changing data bases	"FILE———" (insert file name)	.FILE————(insert file #) or!———— (insert file number)			
Root searching	Term # (for single character) or Term : (for multiple characters)	SELECT term? (up to 50 terms)			
Text searching	STRINGSEARCH or STRS (searches for words or imbedded character strings)  SENSEARCH or SENS (searches for words or imbedded character strings in a sentence)	SELECT term(w)term (word proximity search; different forms available)			
Restricting searches	Date ranging	LIMIT or ); LIMIT ALL (dates, language, accession numbers)			
Output					
Online printing	"PRINT" or "PRT": "PRINT TRIAL" or "PRT TRIAL"; "PRINT FULL" or "PRT FULL": "PRINT———" or "PRT———" (specify search statement nos., format instructions & field acronym; prints as directed)	DISPLAY or % (used for CRT); TYPE or ' (for hard copy terminals)			
Offline printing	"PRT OFFLINE" (also applies to any print command above)	PRINT or &			
Causes display of next CRT page	Not applicable	PAGE or O			
Set aside items from display	Not applicable	KEEP or (			
Interupt online output	Not applicable	break key			
Erasing single characters	backward slash key or ¢/ (varies with terminal)	back arrow or backspace key (varies with terminal)			
Erasing entire lines	dollar sign key	escape key			
Support Features					
Requesting system news	"NEWS"	?NEWS			
Providing explanation of commands, program messages, operating procedures, etc	"EXPLAIN———" or "?"; "EXPLAIN" (refers to last command)	EXPLAIN			
Assisting user on how to proceed	"HELP"	Not applicable			
Personalized assistance	"COMMENT"	SEND MESSAGE/			
Provide search description	"DIAGRAM" (search logic)	DISPLAY SET HISTORY or %			
Change form of program messages	"VERSION————" or "VERS"; "VERSION————ALL" or "VERS————ALL"	Not applicable			
Order copies of articles	"ORDER"	Not applicable			
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## Thefts, Mutilations and Library Exhibits

### Robert W. Culp

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■ The subject of library losses through theft and mutilation is briefly examined from ethical and economic points of view. An exhibit is described in which the patron population is made aware of the problem. A dialog between patron and librarian serves to personalize and intensify our mutual concerns.

THOSE who have had a nodding acquaintance with the history of libraries will recall that books were at one time chained to library tables. These volumes had been painstakingly produced one at a time, and the need for their conservation was manifest. Although Gutenberg's printing press eliminated single-copy book production, the conservation of library materials remained a concern. Now it was the patron rather than the volume who became the focus of the theft and mutilation problem. If only libraries had been blessed with brimming budgets down through the years! Libraries would have ceaselessly replenished book and journal losses and only the moral and ethical facets of the problem would have persevered. But today both aspects plague us; budgetary limitations preclude wholesale replacement policies while unconscionable theft and mutilation practices continue unabated.

Over the years libraries have investigated many aspects of this pernicious problem, and librarians have implemented

numerous strategies in efforts to contain it. Richmond (1) recently queried law librarians concerning a variety of deterrent techniques for dealing with theft and mutilation loss. Although he listed twenty-five separate approaches, the actual number is of small consequence. Clearly no single method has been found capable of countering both the economic and the ethical facets of the situation.

#### Approaches to the Problem

Philosophic approaches to the subject vary greatly. Certain institutions prefer to withhold the book from the patron in an attempt to preserve the collection. Others prefer middle-ground approaches, including the imposition of fines, inspections, revocation of library privileges, or the use of detection systems within the library. At the extreme end of the spectrum is the use of posted warning signs. By citing the appropriate section of the legal code together with clearly worded penalties, a library may insult and anger some patrons but it will curb theft and mutilation.

Commenting on university libraries, Hendrick and Murfin (2) believe that a campaign publicizing replacement costs together with specific penalty warnings would help reduce the rate of mutilation. One university library (3) has used fines and/or expulsion warnings as early as 1960. Whether a library favors the moralistic thrust against theft and mutilation or prefers the punitive position, one will scarcely be more effective than the other

in today's society. Some patrons will continue to outwit machines and steal books. Some will smile as they slice out pages from a journal, thus avoiding photoduplication charges. Some will positively chortle as they remove the contents of a loose-leaf bound volume, leaving the sensitized shell intact upon the shelf.

#### Is It Worth Trying?

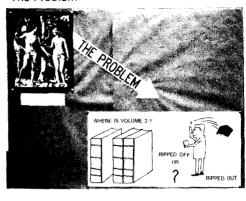
Why then be concerned with yet another try at influencing the user population? Why did the Levy Library set up its display? The answer to each question is identical. First, for economic reasons, theft and mutilation losses must be kept at a minimum. In addition, all patrons must be made aware of the library's position. Levy Library acknowledges that the problem exists and the staff expresses its disapproval of the practice. A position is enunciated by which it is hoped that all but the most brazen offenders will be discouraged. This is reality. It must be dealt with.

#### A Solution

The biomedical collection of the Mount Sinai Medical Center is housed in the new Levy Library. The clientele comprises the mix of professional occupations found within a hospital-medical school complex, plus faculty and graduate students of the City University of New York. These patrons needed to be sensitized to the problem of book and journal theft and mutilation. After some discussion, an exhibit was decided upon and the author was asked to implement it. The tenor of the exhibit was established. Aided by staff input, comment and criticism "Mutilation-an Epidemic" was designed and installed in the library in November 1975. Hopefully the thrust of the exhibit was achieved by means of strong initial impact, relevance, and humor. The exhibit was addressed to everyone, and excluded neither color, gender nor national origin of the user population.

The exhibit comprises four units positioned in direct sight of a patron entering the library. At the entry point the patron's

Figure 1. Display Drawing Attention to "The Problem"



attention is drawn to four words "You're hurting—we're hurting," a caption affixed to a huge blow-up photograph of an exquisitely mutilated book. Hopefully the patron will wish to investigate further and approach the exhibit. We further attempt to heighten his curiosity with an eleven by fourteen print of Durer's Adam and Eve with its lead-in message, to wit, that although Adam and Eve managed without textiles, a library could scarcely manage without books. (Figure 1). After the anatomy lesson is learned, the viewer's attention is directed to the salient issue; is missing material stolen or mutilated?

From this point the viewer is brought to the exhibit case of Lost Souls, wherein each mutilated item, complete with its morbidity data, lies moribund. Hopefully some viewers will be appalled at finding among the victims material useful in his or her special field. Included in this case is a finely worded statement by Justice Earl Warren, "In the law beyond the law which calls upon us to be fair . . . each of us is necessarily his own chief justice."

Finally, the viewer becomes party to a dialog which ensues between his peers and the library. Pen and ink sketches of biomedical "types" stand there between the battered books. There are students, technicians, MD's, PhD's, women and men, white and black, and they speak to him. They proffer excuses for justifying their actions in the library. One claims that no one will miss the article he has torn out because he is the only one who

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reads this journal. One has no change. One notes that the photoduplication machine was out of order. One argues that it is too troublesome to sign out materials. The library quietly repudiates these spurious positions. Another asks in disbelief how anyone could do these things to the collection and finally, one soul would like to know if he can help in any way. Yes, he can. The display, of course, is speaking not solely to him, but to all patrons. They are told that if they find material with missing pages they should take the book or journal to a librarian who will try to replace them. Everyone is urged to report observed acts of theft or mutilation at once.

The thrust of the exhibit has been made. It is hoped that the patrons have not viewed it merely as an abstraction and that each of them was "hurt" just a little by what he saw. Hamlet said "The play's

the thing wherein I'll catch the conscience of the king." Perhaps this tactic has caught a few consciences, too.

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# Acquisition Methods of Government Publications in Nigeria

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■ The acquisition of current government publications by a typical Nigerian Research Library has several problems, the most significant of which lies in getting to know what has been published by either the federal or the state governments. The government ministries and their agencies do not, as a regular practice, keep up-to-

date catalogs of their publications, nor do the printers strictly comply with the regulations on depositories. In spite of these difficulties, the Nigerian Institute of Social and Economic Research succeeds in acquiring these government publications through several arrangements which are discussed.

THE NIGERIAN Institute of Social and Economic Research is an autonomous institution established primarily for research into Nigeria's economic and social problems. During its twenty-six years of existence, the institute has undertaken extensive research into problems of economic development and planning, agricultural and industrial development, foreign trade, public finance, education, health, and social welfare. (1). Inflation in Nigeria, port congestion, traffic control, and rural development are some of the current economic and social problems in the country on which the institute is conducting research. The institute has a consultant services unit that undertakes projects, evaluation and feasibility studies for the federal and state governments of Nigeria.

The library of this institute is a mediumsized research library. It serves not only the institute's research fellows and consultants but also extends its facilities to other policy makers, administrators, visiting research personnel, university lecturers, and post graduate students. As the nerve-center of such an institute the library is expected to provide and satisfy the literary needs of all the research personnel. Several of these needs—books, periodicals, government publications—are not available in the library and are therefore procurred from outside sources. The acquisition system of Nigerian government publications, and the attendant problems and methods adopted for solving them, form the subject of this article.

As in all countries, the governments in Nigeria are major publishers. Since 1956, when "Nigerian Publications" was launched, one discovers that the various governments of the Federation, taken together, form the largest single publisher. In terms of subject content too, their publications have proved most useful to readers and researchers seeking in-

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formation on government policies and programmes.

Government participation in the publishing business (2) arose naturally out of the need to explain and bring to the notice of the public the policies formulated by government from time to time. This was accomplished through gazettes, blue books, white papers, civil service lists, trade reports, laws estimates, and memoranda on budgets, land reports, commissions of inquiries, and development plans.

There are three major levels of government in Nigeria, the federal, the state, and the local authority. Literary materials of different types and frequency are, however, published mostly by the federal and state governments. The local government authorities in the states form an arm of one ministry or the other which undertakes their publications. The acquisition of these publications is discussed in two parts, that is, old publications and current publications.

#### **Old Government Publications**

After a search through three main sources, two published by the Nigerian government and a third by the U.S. Library of Congress, (3, 5, 6), letters are written to the relevant government departments or printers requesting copies of the publications needed. Sometimes favourable answers are received and the publications are sent either free or along with an invoice. At other times, the department concerned cannot even locate its own publication. There are no catalogs emanating from various government ministries. In such cases resort is made to the National Archives or the University of Ibadan Library which serves as a repository for all materials published in Nigeria.

#### **Current Government Publications**

The acquisition of current government publications presents peculiar problems most of which have been discussed by Stanley (3). The major difficulties are in knowing the materials that have been published by the governments in Nigeria, since neither the federal nor the state

governments keep up-to-date catalogs of their publications. In addition, the Government Printer's Lists, where these produced. are never really comprehensive. The tendency is to exclude some mimeographed documents from the ministries and departments. Other government publications printed through sources other than the official government printer may also not be listed by the Government Printer. By and large the Government Printer's Lists remain selective, incomplete, and cannot, therefore, constitute the sole source of information regarding government publications. At the Nigerian Institute of Social and Economic Research, current government publications are acquired through enquiries by writing, visits and personal contacts; direct purchasing; and exchange systems.

#### **Acquisitions through Enquiries**

Because of the diversified nature of the institute's research programs, the librarian is in close touch with the librarians and other officials of the various government ministries and departments whose activities fall within the orbit of the institute's research interests. Most frequent contacts are made with the Federal or State Government Printers, the Federal Office of Statistics and the Federal and State Ministries of Finance & Economic Development, Agriculture & Rural Development, Local Government and Information, Labor, Housing, Industries, and Education.

The publications that emanate from these government ministries and departments form the working tools of the institute's research fellows. The Digest of Statistics and Annual Abstract of Statistics, published by the Federal Office of Statistics, are in very great demand. So also are the National or State Development Plans, Progress Reports on these Plans, federal or state financial estimates and budget speeches all of which are published by Government Printers. In the endeavor to establish and maintain contact with government ministries and departments, difficulties often arise through the occasional reshuffle of govern-

ment ministries. These result in either the merging of two or more ministries, the creation of an entirely new ministry or the changing of the name of an existing ministry creates fresh problems in this line of communication. When new states are created, the entire process of establishing contact is started over with each.

Some of the government publications already mentioned are produced periodically and on a regular basis. For some others that have no regularity about them, it is usually possible to anticipate their time of release. In either case, request letters for the publications are usually sent by the institute in advance of their release by the printer. Where necessary, reminders are sent four weeks after the initial request letter. These help a good deal in eliciting responses. The experience in the institute is that not all state Government Printers respond to letter requests, for reasons which remain obscure. A personal visit to the Government Printer and discussions with the officials concerned therefore become necessary. These have usually been rewarding.

#### Acquisitions by Purchasing

Most Government Printers and Ministries supply complementary copies of some of their publications to the institute. These, especially the Federal Development Plans, do not always meet the institute's need. Thus several extra copies of these publications must be purchased. Orders are usually placed through the University of Ibadan Bookshop. (The institute is located within The University of Ibadan Campus.) Acquisition through payment does not present any problems.

#### Acquisition by Exchange

The Institute Library operates a vast exchange program with national and international organizations and institutions. Nigerian federal and state research institutes also have a prominent role in this arrangement. The publications from these national sources are usually received in the institute's library long before they are listed elsewhere. This is testimony to the success of this co-operative program.

Now and again the institute also receives lists of duplicate materials intended for disposal by other libraries. Scanning through such lists, one sometimes discovers some useful titles which are then acquired through the exchange program.

#### **Depository Program Legislation**

The official depository program of the Nigerian Federal Government is rather confusing. Originally the publications ordinance, 1950, made the University of Ibadan Library and the Chief Secretary's office the only depositories of every book published in Nigeria. After Macpherson's constitutional reforms by which autonomy was granted to the regional governments, the whole picture changed. The publication laws similar to that of the federal government were passed in Eastern Nigeria in 1955 (amended in 1958), in Western Nigeria in 1956, and in Northern Nigeria in 1964. The text of these laws inadvertently excluded the University of Ibadan. The National Library Act of 1964 added the National Library of Nigeria as a depository library, but only for federal government publications. As a result of these uncoordinated enactments, not one library can be said to automatically receive all the publications of the federal and state governments.

The National Library Decree 1970 (4) has helped to remedy this confused situation. Section 4 of the decree requires the federal government and its statutory bodies and agencies to deposit twenty-five copies of each of their current publications with the National Library. The state governments and their agencies, on the other hand, should deposit ten copies, while commercial publishers deposit three copies of every item published by them. The National Library, in turn, remits one copy of every publication it receives to the University of Ibadan Library. This is in continuation of the privilege the University of Ibadan Library had enjoyed under the Publications Ordinance 1950. In addition, this arrangement represents a security device which ensures that a complete collection of the Nigerian intellectual output is maintained in at least two places.

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It seems therefore that every statutory provision has been made by the federal government which should ensure that every published material from whatever source is deposited with one body or the other.

#### Conclusion

Much of the difficulty experienced by the Nigerian Research Libraries in acquiring some government publications arises because of the inability of some government printers to go along with the official federal government depository program. Strict compliance with the program would, as a first and major step, help to draw attention to the nature and frequency of all government publications. Thereafter the various acquisition processes could be set in motion. But the inability of printers to comply with these statutory requirements demonstrate clearly that the problems are not only statutory in nature. A closer look at the problem may reveal other factors which, when eliminated, might enable the defaulting printers to go along with the federal government depository program.

Depository program apart, one other way through which research libraries could keep track of government publications is the government ministry or printer's list. However, several federal and state government ministries do not keep such a list. One major effect of this is that the librarian of a social and economic research library who needs to be aware of most, if not all, publications by government and its agencies, however obscure, is greatly handicapped. He cannot acquire anything unless he is aware of its existence. If the National Library

eventually lists such publications, it may be too late to be of much value.

Sometimes the existence of certain government publications come to light during discussions with colleagues as well as through conferences, seminars, and workshops. Many, but certainly not all, government ministries and printers cooperate readily with the library in its effort to acquire several of these publications. The uncooperative ones do so for no apparent reason. They do not respond to requests for even unclassified publications. In such instances personal visits to the ministry or government printer concerned usually yields results.

#### Literature Cited

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- 3. Stanley, Janet / Nigerian Government Publications 1966-73: A Bibliography. Nigerian, Ile-Ife, University of Ife Press, 1975.
- Nigeria Federal Military Government / "National Library Decree No. 29, 1970." Lagos, Federal Ministry of Information, 1970. Old Government Publications
- 5. Library of Congress / A guide to "Official Publications, Nigeria."
- Ibadan University Main Library / "Nigerian Publications 1950-1970"; National Library of Nigeria / "Nigerian Publications" 1970—(Now National Bibliography of Nigeria).

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SPECIAL LIBRARIES

# sla news

## Spring 1977 Elections

The Nominating Committee has recommended candidates for SLA officers. For President-Elect the nominees are Judith J. Field and Vivian D. Hewitt. For Division Cabinet Chairman-Elect, they have chosen Joan Schechtman and Virginia E. Yagello; for Chapter Cabinet Chairman-Elect, Laura N. Gasaway and Jeannette M. Privat. The nominees for Directors are James B. Dodd, Floyd L. Henderson, David E. King, and Doris L. Schild.

Members continuing to serve on the Board of Directors for 1977/78 will be President,

Shirley Echelman; Immediate Past President, Mark H. Baer; Treasurer, Ellis Mount; Chairman of the Division Cabinet, Renata Shaw; Chairman of the Chapter Cabinet, Mary Sexton; and Directors, Robert G. Krupp, H. Robert Malinowsky, Aphrodite Mamoulides, and Mary Lee Tsuffis.

Further nominations, accompanied by written acceptance of the nominee, may be entered by petition of 25 voting members and shall be filed with the administrator of the Association Office at least four months prior to the Annual Business Meeting.

## Committee Approved

The Board of Directors of SLA has elected the 1977-78 Nominating Committee. This committee will present candidates to the Board in October 1977 for the Spring 1978 election. The members of the committee are as follows: Gilles Frappier, chairman; Roger Martin; Lou Parris, Ruth S. Smith; and Anne Roess.

### **Books Donated**

The Association Office in connection with its policy of supporting facilities in correctional institutions whenever possible has contributed an assortment of books on topics of general reading interest to the Northern Nevada Correctional Center in Stewart, Nevada.

R. F. Taylor, education counselor at the Nevada center, wrote to say, "I can assure you that all of the books you sent us will be put to good use."

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N.B. The Chapter and Division Cabinets and the Board of Directors of SLA will meet Jan. 27-29, 1977, in Seattle, Wash.

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### CHAPTERS & DIVISIONS

Alabama—Donald Foos, dean, School of Library Science, Louisiana State University, spoke at the September meeting at Elgin Air Force Base, Florida. A tour of the base was followed by a Chapter Board meeting and dinner.

Baltimore—The Chapter met in September for a day-long session which included a tour of several Baltimore libraries and a Dutch treat lunch.

The chapter sponsored its first Baltimore-Washington Bookfair (hopefully an annual event) on Oct 23. Members had the opportunity to browse, sample refreshments, and talk to area booksellers.

Boston—The Chapter visited the Houghton Library, Harvard University, at the end of September. The tour was followed by a reception.

Cincinnati—On Sep 15 the Chapter gathered to hear Helen Slotkin, archivist and head of special collections, University of Cincinnati, speak on the preservation and repair of library materials.

The "Greater Cincinnati Directory of Information Resource Centers" is available from Kay Barkley, Jewish Hospital Medical Library, Burnet Ave., Cincinnati; Ohio 45229. The cost is \$5.00.

Connecticut Valley—The Sep 8 meeting had two speakers. Nancy Lambert and Jack Perry Brown addressed the "Handling of Unusual Materials: A Walking Tour of Two Yale University Art Galleries."

The Oct 14 meeting was held at the Institute of Living in Hartford. Following a business meeting, Helen Lansberg, librarian at the institute, explained her specialized library and services.

**Dayton**—A dinner meeting in September was addressed by Gayle Stafford, Columbia Gas of Ohio, on "The Energy Enigma."

Florida—The Chapter meeting on July 30 combined an Executive Board meeting, a Chapter business meeting, and a continuing education workshop. The panel for the workshop consisted of Judy O'Dell, Dr. Martha Jane Zachert, and Phyllis Cartwright.

Hudson Valley—The meeting at Marymount College was held Sep 28. Peter Parks spoke to the assembly on "Library Planning Without Trying."

New Jersey—The Chapter celebrated the proclamation of Special Librarians Day, May 8, by the governor of New Jersey with a special program. Andrew Garvin, "Find S/V/P"; Miriam Tees, "Where are Special Libraries Going"; and Alphonso Trezza, "Role of Special Libraries in the National Plan" were some of the notable speakers.

Oklahoma—The Chapter now has available the Directory of Special Libraries and Information Centers in Oklahoma. The cost is \$3.00. It may be obtained from Jean Thompson, Public Service Company of Oklahoma, P.O. Box 201, Tulsa, OK 74102. Checks should be made out to Special Libraries Association, Oklahoma Chapter.

Pittsburgh—A dinner and short business meeting was held Sep 23 at the Faculty Club, University of Pittsburgh. The program consisted of an address by Dr. Talbert Fowler, who discussed the planning and construction of the new Law Library, and a tour of the building.

Public Utilities—A Union List of Serials for Public Utility Libraries, 3d ed., has been compiled by the Public Utilities Division. This edition consists of 25 contributing libraries with a total of 2,624 titles. Copies are available for \$10.00 each from Esther A. Reppucci, NEGEA Service Corporation, P.O. Box 190, Cambridge, Mass. 02139.

Publishing—The Division still has copies of "Profiles of Publishing Libraries" available. The articles cover 17 different publishing industry related libraries with descriptions of each library's function and services. Prepayment is required. The cost of the issue is \$3.00. Checks should be made payable to Special Libraries Association/Publishing Division. Order your copy from Ron Coplen, librarian, Harcourt Brace Jovanovich, Inc., 757 Third Ave., New York, N.Y. 10017.

Rio Grande—A joint colloquium was held with the Colorado Chapter Sep 10-12 in Santa Fe, New Mexico. The topic of the colloquium was energy, both solar and nuclear energy were considered.

The Oct 1 meeting was held in Tucson in conjunction with the Arizona State Library Association. The Chapter business meeting was followed by a tour of the Pima County Jail Library.

San Francisco Bay Region—The Chapter has sponsored several meetings this fall. Mark Baer addressed the first meeting in September.

A program, entitled "Librarians Look at Copyright," was held in conjunction with the 1976 Annual Conference of the American Society for Information Science in October.

The Bay Area Reference Center, core of an information network based at the SF Public Library, was the subject of a workshop, followed by a management by objectives seminar.

Sierra Nevada-A "Brown Bag Lunch" was scheduled for Sep 29 at the Government Publications Section, California State Library, Sacramento. The staff of the library was on hand to give tours and answer questions.

South Atlantic—The Chapter has compiled a "Directory of Special Libraries in the Georgia-South Carolina Area" with Mary K. Slack as editor. Orders should be sent to her at the Medical Library, Northwest Georgia Regional Hospital, 300 Redmond Road, Rome, Ga. 30161. Checks for \$6.50 should be made payable to the South Atlantic Chapter, SLA.

Texas—A continuing education seminar was presented Sep 17-18 in Houston. The theme of the meeting was "A User's View." It was planned in cooperation with the Texas Chapter of the American Association for Information Science.

## Copyright and NTIS

From: F. E. McKenna, Executive Director Special Libraries Association

The Honorable Peter N. Rodino, Jr. To: Chairman, House Committee on the Judiciary

2642 Rayburn House Office Building Washington, D.C. 20515

Re: S.22 (HR2223) Copyright Revision Bill Section 105, National Technical Information Service

#### Dear Mr. Rodino:

Special Libraries Association is deeply concerned with the immediate effects and the future implications of the amendment to Section 105 that permits copyright in publications of National Technical Information Service (NTIS) for a limited period of five years. Because our Association's first concerns have been with Section 108 as it relates to library photocopying, we did not have time to submit comments on Section 105 to Representative Kastenmeier's Subcommittee. We believe that the Subcommittee may not have been completely aware of the many far-reaching implications of this amendment. Therefore, we ask that the Committee on the Judiciary consider our comments on Section 105 at this time

Our first concern is that such an exemption

for NTIS documents establishes a precedent for other federal agencies and departments to seek special exemptions for their publications. A fundamental principle is involved. Such documents are produced either by U.S. government employees or by employees of contractors. The owners of the material are therefore the taxpayers who have paid for the work reported in the document.

Access to U.S. government publications must not be subjected to controls which can severely limit access or even deny access. We cannot see how the broad amendment-with no safeguards—can serve the American public. The depository libraries in every congressional district will be adversely affected because fewer government publications will be distributed to the depository libraries through the Government Printing Office.

A misconception exists in the minds of many persons that NTIS documents include only technical subjects, primarily from DOD and NASA. This is untrue; NTIS documents include every area of concern to the U.S. taxpayer. A very short selection from NTIS' own list of federal agencies whose reports are in the NTIS collection is:

Social & Economic Statistics Administration (Commerce)

Office of Minority Business Enterprise (Commerce)

Food and Drug Administration (HEW)
National Institute on Alcohol Abuse & Alcoholism (HEW)
New Communities Administration (HUD)
Water Resources Division (Interior)

Water Resources Division (Interior)
Bureau of Labor Statistics (Labor)
Office of Revenue Sharing (Treasury)
Federal Trade Commission

NTIS has stated that its total collection contains more than 900,000 items, and that 60,000 items are added each year. Many such items are only of evanescent value because they are, for example, quarterly progress reports on government-sponsored research contracts. The cost to both NTIS and the Copyright Office to process 60,000 items a year

for copyright registration can well exceed the royalty income from foreign republishers as projected by NTIS.

It has come to our attention in recent weeks that new NTIS publications have already been printed and distributed with a copyright notice! We must conclude that such action by NTIS before enactment of the new law is an act of arrogance that will already impede and confuse access to public documents.

Copyright is a private privilege. Materials produced with public monies are in the public domain. We respectfully urge the Committee to remove the amendment to Section 105 which grants a limited term of copyright of five years to any publication of the National Technical Information Service.

[The following paragraphs have been extracted from the copyright report as printed in the Congressional Record-House, Sep 29, 1976, p. H 11728.]

Copyrightable Subject Matter Publications of the United States Government

#### Senate bill

Under section 105 of the Senate bill, both published and unpublished works of the United States Government were excluded from copyright protection.

#### House bill

The House bill retained the general prohibition against copyright in U.S. Government works, but made one specific exception in favor of any publication of the National Technical Information Service. The Secretary of Commerce was authorized to secure copyright in such works, on behalf of the United States as

author or copyright owner, for a limited term not to exceed five years.

#### Conference substitute

The conference substitute conforms to the Senate bill. Because of the lack of Senate hearings on the issue, the conferees recommended that the NTIS request for limited copyright in order to control foreign copying be considered at hearings early in the next session. In the interim, consideration should also be given to compensatory appropriations to NTIS in lieu of revenues lost as a result of unauthorized foreign copying.

#### WASHINGTON LETTER

#### Florence Agreement at UNESCO

The Agreement on the Importation of Educational, Scientific and Cultural Materials (otherwise known as the Florence Agreement), drafted in 1950 and adhered to by the United States since 1966, may be broadened to include films, recordings and microforms, in addition to the traditional print materials it now covers. The purpose of the Florence Agreement is to facilitate the international flow of educational materials by exempting certain of them from customs duties and other importation charges.

A protocol to broaden the Florence Agreement to include nonprint materials is on the agenda of the UNESCO General Conference which convenes in Nairobi, Kenya on October 26. If approved there, the protocol is expected to be transmitted to the U.S. Senate by the President for ratification as a treaty. The full text of the draft protocol appears in the September 27, 1976, Federal Register, on pages 42223-42226.

#### Museums, Zoos, and Botanical Gardens

In the closing days of the 94th Congress, a new Museum Services Act was enacted and now awaits President Ford's signature as part of the Arts, Humanities, and Cultural Affairs Act of 1976 (HR 12838). Zoos, botanical gardens, and all types of museums including those of technology, science, art, and history are eligible for assistance from the new program which is to be directed by an Institute of Museum Services to be established within the Department of Health, Education, and Welfare.

No funds are available yet for the new program, but if museums make their needs known sufficiently to Congress, it is conceivable that at least minimum start-up funds could be included in the supplemental appropriations bill Congress will be working on next spring. The purpose of the new program is to provide assistance for exhibits, educational programs, professional curatorial training, conservation of collections, traveling programs, and general operating expenses.

#### Copyright Revision Enacted

The long-awaited copyright revision bill cleared Congress on September 30, and President Ford was expected to sign it into law by October 18 at the latest. The new law will not take effect until January 1, 1978. Librarians of all types are urged to study carefully its provisions. The conference report reconciling differences between House and Senate versions of the bill (S.22) was printed in full in the September 29 Congressional Record, Part II, beginning on page H-11709. The conference report includes the text of the guidelines on library photocopying developed by the National Commission on New Technological Uses of Copyrighted Works (CONTU).

A controversial provision that would have allowed the Secretary of Commerce to secure five-year copyrights on publications disseminated by the National Technical Information Service (NTIS) was dropped at the last minute, and this provision is not part of the new copyright law. House-Senate conferees recommended that the NTIS copyright proposal be the subject of congressional hearings early in 1977, and expressed considerable concern about the effects of foreign pirating. "Widespread copying of NTIS publications is especially prevalent in foreign nations. In Japan it is reported that NTIS reproductions are sold having a value of \$3,000,000 annually. A United Kingdom copier sells nearly twice as many copies of NTIS publications as NTIS does directly to the U.K. . . . "

Arguments opposing the copyrighting of government publications are summed up in a *Congressional Record* insertion submitted by Rep. Joseph E. Karth of Minnesota which calls attention particularly to the constitutional question raised by allowing the U.S. Government to copyright publications prepared at public expense. (See *Congressional Record*, October 1, 1976, Part IV, page E 5596.)

#### White House Conference

After announcing, on July 19, his intention to convene the White House Conference on Li-

brary and Information Services, President Ford finally submitted his budget request to Congress on August 30 (H.Doc. 94-591), but it was too late in the congressional year for Congress to enact supplemental appropriations. No action was taken on the President's request and it therefore died with the final adjournment of the 94th Congress. The budget request must be submitted anew after the 95th Congress convenes in January 1977.

In announcing his intention to convene the Conference not later than 1978, President Ford briefly discussed the importance of improved information service. In part he said: "The challenge confronting those who provide information services to the public is one of harnessing modern technology. Telecommunications, computers, and micrographics must be further employed to reduce the costs of making information more widely accessible and improving the speed and accuracy with which source materials can be supplied. The librarian of today's space age serves a profession and a public more demanding and exacting than ever before." (For full text of the Ford statement see Weekly Compilation of Presidental Documents, July 26, 1976, page 1186.)

#### Postal Amendments

Public Law 94-421, signed by the President on September 24, provides a ray of hope that the ever faster rising cost of postage may be slowed somewhat. Among other library-related provisions of this law is one requiring the Postal Rate Commission to adopt a new criterion in rate setting: the educational, cultural, and informational value of the mailed matter is henceforward to be considered. Before adjourning, Congress appropriated \$500 million for the foundering Postal Service, and promised to make another \$500 million in bailout funds available for the Service next year as well.

Copyright Revision Bill (S.22)-Legislative History

Reported from Senate Judiciary Committee 11/20/75—S.Rept. 94-473

Passed Senate 2/19/75—vote 97-0

Reported from House Judiciary Committee 9/3/76 — H.Rept. 94-1476

Passed House 9/22/76—vote 316-7

Conference Report issued 9/26/76—H. Rept. 94-1733

Conference report adopted by Senate 9/30/76—vote 75-0

Conference report adopted by House 9/30/76—voice vote

Public Law 94-553

#### COMING EVENTS

Jan 29. Encounter with Media: A One-Day Hands-On Workshop... University of the District of Columbia, Washington, D.C. Sponsored by the Council on Library Technology and the Society of Library and Information Technicians. Contact Raymond Roney, University of the District of Columbia, Van Ness Campus Library, 4200 Connecticut Ave., N.W., Washington, D.C.

Jan 27-29. Special Libraries Association, Chapter and Division Cabinets and Board of Directors, Winter Meeting... Washington Plaza, Seattle, Wash.

Jan 28-30. Association of American Library Schools... Washington, D.C. Topic: The New Information Professional. Write: Brigitte L.

Kenney, Graduate School of Library Science, Drexel University, Philadelphia, Pa.

Jan 28-Feb 2. Art Libraries Society of North America, Fifth Annual Conference . . . Statler Hilton Hotel, Los Angeles, Calif. For information: Judith A. Hoffberg, Executive Secretary, P.O. Box 3692, Glendale, Calif. 91201.

Jan 30-Feb 5. ALA Midwinter Meeting... Washington, D.C.

Feb 28-Mar 3. COMPCON '77 Spring... San Francisco, Calif. Write: Executive Secretary, Institute of Electrical and Electronics Engineers Computer Society, P.O. Box 639, Silver Spring, MD. 20901

Feb 4-5. Continuing Library Education Network and Exchange, Third Assembly ... Washington, D.C. Theme: Staff Development by Area of Responsibility. Contact Mary Baxter, Box 1228, 620 Michigan Ave., N.E., Washington, C.D. 20064.

Mar 7-9. National Federation of Abstracting and Indexing Services, Annual Conference . . . Arlington, Va. Contact: NFAIS, 3401 Market Street, Philadelphia, Pa. 19104.

Mar 13-15. Association of Information and Dissemination Centers, Spring Meeting . . . Atlanta, Ga. Theme: Techniques of Training and Education. Sponsors: ASIDIC Secretariat and The University of Georgia. Contact: ASIDIC Secretariat, P.O. Box 8105, Athens, Ga. 30601.

Mar 21-23. American National Metric Council, Third Annual Conference and Exposition... Chicago, Ill. Contact: George B. Buchanan, American National Metric Council, 1625 Massachusetts Ave., N.W., Washington, D.C. 20036

Mar 27-28. Institute on Quantitative Measurement and Dynamic Library Service... School of Library Science, Simmons College, Boston, Mass. Unit II: Critical Evaluation of Quantitative Methods for Library Management. Contact: Coordinator of Continuing Education, School of Library Science, Simmons College, 300 The Fenway, Boston, Mass. 02115.

Apr 13-16. Texas Library Association, 64th Annual Conference... El Paso, Texas. Cosponsor: New Mexico Library Association. Theme: In Search of Learning. Contact: Margaret Mathis, Publicity Chairman, TLA '77 Conference, 9901 Cork Drive, El Paso, Texas 79925.

Apr 17-23. National Library Week

Apr 20-22. Connecticut Library Association, Annual Convention . . . Norwich, Conn.

Apr 24-25. Conference on Education for Information Science; Strategies for change in Library School Programs . . . State University of New York/Albany. Sponsors: ISAD/LED of ALA, AALS, ASIS, SLA, MLA. Contact: Irving M. Klempner, School of Library and Information Science, State University of New York at Albany, 1400 Washington Ave., Albany, N.Y. 12222.

Apr 24-27. Clinic on Library Applications of Data Processing... University of Illinois, Urbana. Theme: Negotiating for Computer Services. Write: Edward C. Kalb, Office of Continuing Education; University of Illinois, 116 Illini Hall, Champaign, Ill. 61820.

Apr 28-29. National Archives History Conference... Washington, D.C. Co-sponsor: Agricultural History Society. Title—Farmers, Bureaucrats and Middlemen: Historical Perspectives on American Agriculture. Write: Dr. Trudy Peterson, National Archives and Records Service, Room 103, Washington, D.C. 20408.

Apr 28-30. Maine Educational Media Association/Maine Library Association, Annual Conference . . . Rockport, Maine.

#### Future SLA Meetings

1977

Jan 27-29. Winter Meeting . . . Washington Plaza, Seattle.

June 5-9. 68th Annual Conference... New York Hilton, New York, N.Y.

Oct 27-29. Fall Meeting... Gramercy Park Hotel, New York, N.Y.

1978

Feb 2-4. Winter Meeting ... Indianapolis Hilton, Indianapolis.

Jun 11-15. 69th Annual Conference . . . H. Roe Bartle Convention Center and Radisson Muehlebach Hotel, Kansas City, Mo.

Oct 26-28. Fall Meeting... Gramercy Park Hotel, New York, N.Y.

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#### **PUBS**

(76-107) World Directory of Map Collections. Ristow, Walter W., ed. International Federation of Library Associations, Special Libraries Section, Geography & Map Libraries Sub-Section, comp. München, Verlag Dokumentation, 1976. 326p. (IFLA Publications 8). DM 48. ISBN 3-7940-4428-2

Approximately 285 collections in 45 or more countries are listed.

(76-108) Directory of Special Libraries in Israel (Excluding Humanities). 4th ed. Tel-Aviv, National Center of Scientific and Technological Information, 1976. liv, 182p. \$15.00.

In English and Hebrew, Includes approximately 350 special libraries, Available from: National Center of Scientific and Technological Information, P.O.B. 20125, Tel Aviv, Israel.

(76-109) Membership Directory. Continuing Library Education Network and Exchange (CLENE). Washington, D.C., CLENE, 1976. 288p. \$25.00 (\$12.75 CLENE members).

(76-110) Microform Market Place 1976-1977; An International Directory of Micropublishing. Meckler, Alan Marshall, ed. Weston, Conn., Microform Review Inc., c1976. 188p. \$14.95. LC 74-4811 ISBN 0-913672-00-9

Micrographics equipment and supply manufacturers are not included.

(76-111) A Reader in Library Management. Shimmon, Ross, ed. Hamden, Conn., Linnet Books, 1976. 213p. \$10.00. LC 76-10382 ISBN 0-208-01378-4

Collection of reprinted articles.

(76-112) National and International Library Planning. Vosper, Robert and Leone I. Newkirk, eds. München, Verlag Dokumentation, 1976. 162p. (IFLA Publications 4). DM 38. ISBN 3-7940-4424-X Key papers presented at the 40th session of the IFLA General Council, Washington, D.C., 1974.

(76-113) Oral History Guide No. 1: A Bibliographic Listing of the Memoirs in the Micropublished Collections. The New York Times Oral History Program. Glen Rock, N.J., Microfilming Corp. of America, 1976. 244p. \$17.50. LC 76-5389 ISBN 0-88455-996-3

Ten collections are included in this work.

(76-114) Geography and Cartography; a Reference Handbook. 3d ed. rev. and enl. Lock, C.B. Muriel. Hamden, Conn., Linnet Books, c1976. 762p. \$32.50. LC 76-8273 ISBN 0-208-01522-1

Handbook combines and updates Dr. Lock's earlier Geography; a Reference Handbook and his Modern Maps and Atlases.

(76-115) Introduction to Library Science: Basic Elements of Library Service. Shera, Jesse H. Littleton, Colo., Libraries Unlimited, 1976. 208p. \$10.00. LC 76-21332 ISBN 0-87287-173-8

Aims to explore librarianship and the opportunities it offers to those who choose it as a career.

(76-116) **Bibliography.** Kumar, Girja and Krishan Kumar. New Delhi, India, Vikas Publishing House Pvt. Ltd., c1976. 257p. ISBN 0-7069-0431-1

Introduction to bibliography.

(76-117) Geoscience Information Society, Proceedings. vol. 6, 1976. Retrieval of Geoscience Information. Hall, Vivian S., ed. 192p. \$12.00.

(76-118) Knowledge and its Organization. Batty, David, ed. College Park, Md., Univ. of Maryland, 1976. 145 p. (Univ. of Maryland. College of Library and Information Services. Student Contribution Series. No. 8). \$8.75. LC 76-620022 ISBN 911808-12-4

Student papers presented in 1974 and 1975 courses.

## SLA Salary Survey 1976

The 1976 SLA Salary Survey is the fifth salary survey and the fourth regular triennial salary survey to be conducted by Special Libraries Association. The triennial surveys were in 1967, 1970, and 1973 (I-3). To allow comparison with the earlier surveys the 1976 questionnaire (Appendix B) was as similar as possible. The earliest survey in 1959 (4) was such that much of the 1959 data are not compatible with the series of triennial surveys.

The objectives of the SLA Salary Surveys were defined in 1967 as:

To obtain systematic accurate information about the salaries of special librarians and information personnel;

To establish a data bank from which inquiries about salaries can be answered for persons engaged in personnel and recruitment activities, for prospective students, and for SLA members themselves; and

To enable SLA members to assess their own salaries in view of the numerous variables.

During compilation of the 1970 Salary Survey, a number of uncertainties had been encountered concerning the internal consistency of some returned questionnaires. Therefore the 1973 and 1976 Salary Survey questionnaires were designed to allow for computer intercomparison and challenge by internal computer "controls."

Respondents who reported that they were unemployed on Apr 1, 1976, or who reported only part-time employment were not included in calculations of either means or medians. The reported salary means and medians represent respondents employed on a full-time basis and those whose academic year basis could be converted to a calendar year equivalent (by computer conversion).

#### **Annual Reports in Future Years**

Since 1970 and especially since 1973 it has become apparent that triennial surveys are too infrequent to keep pace with changing economic conditions. On the other hand, the costs

associated with a Salary Survey of all SLA members are such that funds are not available for a total survey on an annual basis. Therefore the data collection and report format of salaries in this 1976 survey have been modified so that a random sampling of a relatively small fraction of SLA members in 1977 and 1978 will allow an annual updating of the basic salary tables with assurance of satisfactory statistical accuracy.

The modification of the report format for this survey presents the SLA report in a standard salary format in terms of percentiles instead of the arbitrary \$1,000 ranges used in the past surveys. The desirability of a presentation in terms of percentiles has frequently been recommended to the Association by salary administrators and by the administrators of personnel departments. Data are reported for the 25th, 50th, and 75th percentiles where the 50th percentile is the median. Instead of reporting the lowest and highest salaries, the average of the lowest 10% and the average of the highest 10% are reported. This method prevents possible identification of individuals at the low and high extremes.

#### Mean Annual Salary in 1976

The mean is the average. For a discussion of the relationship of the mean and the median see the following section.

The mean (average) basic annual salary on Apr 1, 1976, was \$16,300. This is a 16% increase over the 1973 mean of \$14,000 and a 38% increase over the 1970 mean of \$11,800. The mean and median annual salary distributions are in Table 1a and Figure 1. The increase in mean salaries and increase in CPI (Consumer Price Index) are in Table 1b. Although the percentage increase in CPI are the same, it would be rash to conclude that all respondents' salaries have kept pace with the increase in CPI.

In the 1976 survey only 3% (129 respondents) reported a basic annual salary of \$9,000 or less. There has been a marked upward

Table 1a. Basic Annual Salaries: 1967, 1970, 1973 & 1976

Survey	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
1967	3,867	*	*	\$9,000	*	*	\$9,600
1970	3,594		*	11,000	*	*	11,800
1973	3,893	•	*	12,800	•	•	14,000
1976	4,233	\$9,300	\$12,400	15,000	\$18,800	\$28,500	16,300

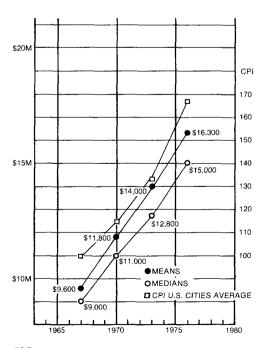
<sup>\*</sup>Not calculated.

Table 1b. CPI and Mean Salaries

Survey Year	Mean Salaries	CPI* (at Apr 1)
1967	\$9,600	99.1
1970	11,800	115.2
1973	14,000	130.7
1976	16,300	168.3
Change 1967-1976	69.8%	69.8%

<sup>\*</sup>CPI for U.S. Cities Average.

Figure 1. Annual Salaries: 1967, 1970, 1973, 1976



movement at the lower extreme because in 1973 about 10% of the respondents reported basic annual salaries of \$9,000 or less. Minimums had been defined by SLA Board policy in 1971 for classified ads for "Positions Open" to be accepted by Special Libraries and for Employment Opportunities: \$9,000 for positions in the U.S. and \$8,500 for positions in Canada (5).

## Median Annual Salary and Percentiles in 1976

The median basic annual salary on Apr 1, 1976, was \$15,000 which is a 15% increase over the median of \$13,800 in 1973.

The median is an arithmetic average which represents the salary at the center of the distribution. Half of the salaries reported are less than the median, and half are greater than the median. When the median salary for any group is less than the mean salary, more respondents are below the average than above. With a few exceptions in this report, the medians are less than the means.

By the definition of the median as stated above, the median is also at the 50th percentile of the respondents. Similarly, one-quarter of the salaries reported are less than the 25th percentile. Three-quarters of the salaries reported are below the 75th percentile; or stated in other words, the 75th percentile shows that one-quarter of the salaries reported are above the 75th percentile.

#### **Survey Questionnaire**

On Mar 26, 1976, a questionnaire was mailed to persons in three SLA membership categories: Member, Member (Paid-for-Life), and Associate Member. Questionnaires were not mailed to Student, Retired, Sustaining, or Honorary Members. An explanatory letter accompanied the questionnaire as well as a

postage paid return envelope. To insure complete anonymity the questionnaires were returned to a special Post Office Box address.

Of the 6,974 questionnaires mailed, 4,551 (65%) were returned by the deadline date (Apr 19, 1976). Of the questionnaires returned, 318 could not be used in the tabulation and analysis because of invalid or internally inconsistent answers. Thus there were 4,233 usable responses.

	Questionnaires Mailed	Usable Responses		
1967	5,752	3,867 (67%)		
1970	5,975	3,594 (60%)		
1973	6,108	3,893 (64%)		
1976	6,974	4,233 (61%)		

#### Presentation of Data

Data in this report are presented to show the relationships between salaries and a number of factors. When there were fewer than 20 respondents in any category, that category has not been separately identified in this report. In general, the percent of respondents in each category is reported instead of the actual number of respondents.

An important consideration in the use of any anonymous survey is often overlooked by users of such a survey: The basic assumption must be that the respondents are representative of the non-respondents.\* Because there is no way to identify the non-respondents, there is no way to test this basic assumption.

Note: If a user of the 1976 survey wishes to extrapolate the number of members in any category to obtain an approximation of the total persons in such category (excluding Student Members and Retired Members), a multiplying factor of 1.65 could be used be-

cause all recipients of questionnaires did not respond.

6,974 Questionnaires Mailed ÷ 4,233 Usable Responses = 1.65.

#### **Census Regions**

In the 1976 SLA Salary Survey, the nine geographical U.S. Census Regions have again been used as the largest regions for definition of job location. Canada was considered to be the equivalent of a tenth region. The Census Regions are shown in Figure 2. The salary distributions in rank order of the 1976 means are in Table 2. The corresponding mean salaries for 1967, 1970, 1973, and 1976 are in Table 3.

New England	West North Central
Middle Atlantic	West South Central
South Atlantic	Mountain States
East South Central	Pacific Coast
East North Central	Canada

#### Salaries by Census Regions

The highest mean regional salary in 1976 is again for the South Atlantic Region (\$18,200). This region again also includes the highest mean salary for a Standard Metropolitan Area: \$20,400 for Washington, D.C.-Md.-Va.

The largest increase for a region from 1973 to 1976 was for Canada with a 31% increase in the mean (a dollar increase of \$3,900). Thus Canada moves from eighth place in 1973 to second place in 1976. The mean for Canada is \$16,600†; and the mean for the U.S. is \$16,300. The highest mean for a metropolitan area in Canada is \$18,100 for Ottawa which is now the third highest metropolitan area after Washington, D.C. and Baltimore-Wilmington.

The East South Central Region had the smallest increase (10%; \$1,500), and thus dropped from second place in 1973 to fifth place in 1976. The West North Central Region continues as the lowest—in tenth position.

<sup>\*</sup>For the 1970 survey there existed one independent observation (i.e., not derived from returned questionnaires) that may suggest that the respondents were not all representative of the non-respondents. This independent observation was an "eyeball" comparison of the Jun 30, 1970 membership directories of SLA and of ASIS. This matter is discussed in more detail in a footnote to Table 11a. No similar comparison could be made for the 1973 or 1976 surveys. With only one apparently discrepant datum, it is probably premature to attempt any hypothesis whether the respondents to SLA Salary Surveys are or are not representative of the non-respondents.

<sup>†</sup>The 1967 survey had not specified a currency conversion; presumably Canadian members reported salaries in Can\$ in the 1967 survey. The 1970 questionnaire specifically asked Canadian members to report their salaries in US\$ by multiplying Can\$ by the factor, 1.07. The 1973 and 1976 surveys did not specify a currency correction because the two currencies were essentially equal at the time of these two surveys (i.e., the factor would have been 1.00). On Apr 1, 1976, the actual exchange rate was Can\$1.00 = US\$1.0075 or three-quarters of a cent per dollar.

Figure 2. Geographic Distributions of Respondents in Census Regions.



Table 2. Salary Distribution by Census Region in Rank Order of 1976 Mean Salaries

Census Region	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
South Atlantic	604	\$9,500	\$13,500	\$16,800	\$2,000	\$32,100	\$18,200
Middle Atlantic	1,051	9,600	12,600	15,500	19,000	28,400	16,600
Canada	283	10,500	13,100	15,800	18,700	26,500	16,600
1976 Survey	4,233	9,300	12,400	15,000	18,800	28,500	16,300
Pacific Coast	599	9,600	12,400	15,200	18,400	28,100	16,200
East South Central	86	8,700	12,400	14,900	18,600	26,800	15,900
East North Central	776	9,300	12,100	14,400	18,000	27,200	15,700
New England	270	8,900	12,000	14,800	18,000	25,400	15,300
West South Central	195	8,700	11,400	13,800	16,900	29,000	15,300
Mountain States	149	8,800	11,500	14,000	17,500	24,400	14,900
West North Central	203	8,600	11,300	13,600	17,200	25,200	14,700

## Standard Metropolitan Statistical Areas (SMSA)

To avoid the possibility of identifying individual respondents, data are again not reported for a Standard Metropolitan Statistical Area in which there were fewer than 20 respondents. In the 1970 survey some additional SMSAs were added and two or more contiguous (or almost contiguous) SMSAs were grouped together to obtain a higher population of SLA

respondents in identifiable SMSAs. A few additional SMSAs (or contiguous SMSAs) were added to both the 1973 and 1976 questionnaires to attain a more complete coverage of areas where SLA members are employed. Definitions of SMSAs in the 1976 survey also reflect recent changes in the definitions and nomenclature of the U.S. Census Bureau for SMSAs. Such changes do not affect the comparability of 1973 and 1976 data. When the number of replies from an SMSA (or combined areas) did not meet the requirement of a minimum of 20

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Table 3. Mean Salaries by Census Region in Rank Order of 1976 Data

					Incre 1973	
Census Region	1967	1970	1973	1976	\$	(%)
South Atlantic	\$11,000	\$13,500	\$15,900	\$18,200	\$2,300	(14%)
Middle Atlantic	9,600	11,900	14,200	16,600	2,400	(17%)
Canada	8,100*	10,000	12,700	16,600	3,900	(31%)
Mean	9,600	11,800	14,000	16,300	2,300	(16%)
Pacific Coast	10,100	11,900	13,400	16,200	2,800	(21%)
East South Central	9,900	12,300	14,400	15,900	1,500	(10%)
East North Central	9,600	11,600	13,500	15,700	2,200	(16%)
New England	9,300	11,500	13,300	15,300	2,000	(15%)
West South Central	8,900	10,800	12,600	15,300	2,700	(21%)
Mountain States	9,300	11,200	13,100	14,900	1,800	(14%)
West North Central	8.900	11,100	12,500	14,700	2,200	(18%)

<sup>\*1967</sup> Can\$.

Note: 16 respondents in 1976 outside the U.S. and Canada reported salaries with a mean of \$16,400 and a median of \$15,500.

respondents, such replies are, of course, included in the total for the Census Region.

The Standard Metropolitan Statistical Areas are in Table 4 in the rank order of the 1976 mean salaries together with the increases from 1973 to 1976. The changes in rank order are so many that space does not permit individual comment on each change. Each reader must specifically compare the relative position (or change in relative position) of the SMSA that is of personal interest. See the footnotes to Table 4 for the SMSAs which are omitted from the 1976 report because there were fewer than 20 respondents from each such area. Tables 4a 4j are tabulations of the salary distributions for the Standard Metropolitan Statistical Areas within each Census Region.

#### **Primary Employer**

Table 5a shows the salary distribution by type of employer (i.e., institution or business served). Respondents employed by the federal governments (both U.S. and Canada) report the highest annual salaries (median \$19,000; mean \$20,000).

The designation of the organizational entity (library or information center) where employed is in Table 5b.

#### Job Responsibilities and Job Functions

Salaries as related to the number of staff members supervised are in Tables 6a-6d in four categories: total staff, professionals, library technicians (para-professionals), and clerical. Only 23% of the respondents (993 persons) reported that they supervised *no* persons at any level. This figure is substantially lower than estimates that have been stated in past years that about 50% of the members of SLA are employed in one-person special libraries.

Respondents in one-person libraries are at the lowest salary level (that is, zero persons supervised). As the number of persons supervised increases, the salary increases although there are several dips at higher levels. The form of this question was changed in the 1976 survey because results in the earlier surveys were not satisfactory. The 1976 survey results are somewhat clearer, but there is no clear pattern that the categories of persons supervised have an effect on the salary received by the respondent. Seemingly, the total number of persons supervised (at all levels) is the principal controlling factor.

Job functions as distinguished from job responsibilities are in Table 6e; they are in rank order of the median salaries. A different pattern appears in 1976 than in 1973. The largest increase in the median is for "Administrative Responsibilities" from \$15,400 to \$19,000 (23%).

The second largest increase in the median is for general responsibilities in a one or two-person library which has increased from \$11,400 to \$13,200 (16%, but its absolute value is the lowest). Information specialists have dropped from second to fourth place with a 12% increase to

Table 4. Standard Metropolitan Statistical Areas in Rank Order of 1976 Mean Salaries

			Increa ( <b>1973</b> –	
1970	1973	1976	\$	%
15,100 \$	17.800 \$	20,400	2,600	(15%)
ALLEY COMPANIES CONTROL CONTRO		18,300 18,100†	3,500 2,800	(24%) (18%)
		18,000 17,100 ;	2.800 2.100	(18%) (14%)
11,600	13,800	16,800	3,000	(22%)
12,000	14,400	16,700	2,300	(16%)
12,100	13,400	16,600	3,200	(24%)
11,600	13,600	16,500	2.900	(21%)
			2.600	(19%)
		16,300	2,300	(16%)
	14,400	16,200	1,800	(12%)
CALFORD AND RECORD AND AFFE THE ROLL OF	Challe 1881 (Sharen Service Hart Andreas April - Ch	<b>16,100</b> † 15,800	<b>4.200</b> 2.300	<b>(35%)</b> (17%)
9.9001	11.900†		3.900	(33%)
er arrent man en	and the second superior and the second states	15,700	4.500	(40%)
		15,600 15,600	1,300 2,000	( 9%) (15%)
10,800	12.000	15,500 15,500	3.500	(29%)
12.000	12.000	15,500	1.500	(110/)
12,800	13,900	15,400	1,500	(11%)
10,500	12.300	15,400	3,100	(25%)
	13,300	15,400		(16%)
	CONTRACTOR OF THE STATE OF			(11%) -( 9%)
11,900	12,800	15,300	2,500	(19%) (23%)
•	• •	15,200	••	
				(17%) (19%)
	12.700	15,000	2,300	(18%)
12,200	13,400	14,500	1,100	(-8%)
10 900	13 600	14 500	900	( 7%)
10,100	11.000	14,400	3,400	(31%)
10,200	<b>12,200</b> 4 1.600	<b>13,900 </b> 13,500	<b>1.700</b> 1.900	<b>(14%)</b> (16%)
	11,500 12,400 12,400 12,400 11,900 11,600 12,100 11,600 11,600 11,600 11,800 11,800 11,300 11,300 10,200 12,300 11,900	1,500   14,800   15,300   15,300   15,300   15,300   15,300   15,300   15,300   15,300   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   15,000   16,000   16,000   16,000   17	1,500	1970

<sup>\*</sup>SMSA was not separately identified in 1970 survey.

Note: Data for the following SMSAs are not being reported in 1976 because there were fewer than 20 respondents in each: a) Huntsville; Birmingham; Tuscaloosa; Gadsden; b) Syracuse; Utica-Rome; c) New Orleans; d) Albuquerque; e) Victoria & Vancouver.

<sup>\*\*</sup>SMSA was not separately identified in 1973 survey.

<sup>† 1970</sup> US\$; 1973 Can\$; 1976 Can\$.



Table 4a. Salary Distributions in the New England Census Region

	No. Respondents	Avg. of Lowest 10%		50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Boston; Lowell; Brockton	153	\$8,600	\$11,500	\$14,400 12,500	\$17,600	\$25,300	\$15,000 12,800
Hartford: Springfield- Chicopee-Holyoke	39	9.300	11,400	14.700 14,500	18,200	23,900	15.400 13,900
New Haven; Bridgeport; Norwalk; Stamford	28	9,900	13,000	15,000	17,500	23,500	15,700 •
New England—Total	270	8,900	12,000	14,800 12,500	18,000	25,400	15,300 13,300

<sup>\*</sup>SMSA not reported in 1973 survey.



Table 4b. Salary Distribution in the Middle Atlantic Census Region

SMSA	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
New York City, Nassau, Suffolk, Westchester & Rockland Newark (Essex, Morris &	527	\$9,800	\$12,600	\$15,700 13,500	\$19,400	\$28,300	\$16,700 14,400
Union); Jersey City; Paterson-Clifton-Passaid Middlesex; Somerset	;;   113. ;	9.800	13,700	16.000 14,500	21,300	32,700	18,000 15,200
Philadelphia, PaN.J.; Trenton, Reading;							
Lancaster	168	9,700	12,300	15,700 12,500	19,200	27,500	16,500 13,600
Albany-Schenectady-Troy	25	9,800	11,200	14,400 12,500	18,500	24,000	15,300 14,000
Buffalo, Rochester, N.Y.	58	9,400	12,000	14,300 <i>12,500</i>	18,500	26,600	15,600 14,300
Pittsburgh; Johnstown; Altoona	88	8,900	12,000	14,600 12,500	17,500	25,500	15,400 13,300
Middle Atlantic—Total	1,051	9,600	12,600	15,500 <i>13,500</i>	19,000	28,400	16,600 14,200

Note: The numbers in italics are from the 1973 survey.



Table 4c. Salary Distribution in the South Atlantic Census Region

SMSA	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Baltimore; Wilmington, Dal,-N.JMd.	68	\$10.000	\$13.800	\$17,900 13,500	\$22,000	\$30,500	\$18,300 14,800
Washington, D.C MdVa	315	11,200	15,300	19,000 17,500	25,000	34,000	20,400 17,800
Richmond, Va.	21	8,700	10,700	13,400 12,500	16,000	21,000	13,900 12,200
Durham; Raleigh	36	10,500	11,400	13,300 12,500	16,500	23,100	14,500 13,400
Atlanta	41	8,900	10,600	15,600 12,500	22,500	31,900	17,100 15,000
South Atlantic—Total	604	9,500	13,500	16,800 14,500	22,000	32,100	18,200 15,900



Table 4d. Salary Distribution in the East South Central Census Region

SMSA	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Knoxville-Nashville	35	\$9,300	\$12,600	\$15,000	\$17,800	\$24,100	\$15,500
East South Central —Total	86	8,700	12,400	14,900 13,500	18,600	26,800	15,900 14,400

<sup>\*</sup>SMSA not reported in 1973 survey.

Note: The numbers in italics are from the 1973 survey.

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Table 4e. Salary Distribution in the East North Central Census Region

SMSA	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Chicago: Gary-Hammond- East Chicago	273	\$10,000	\$12,500	\$14,700 12,500	\$18,000	\$26,600	\$15,800 13,500
Cincinnati; Dayton	69	8,600	11,500	14,200 12,500	17,500	28,800	15,500 13,500
Cleveland; Akron; Canton; Youngstown-Warren	74	10,000	12,000	13.500 11,500	17,200	27,100	15,200 12,400
Detroit; Flint; Kalamazoo; Jackson; Ann Arbor	141	9,700	13,100	15,500 12,500	19,300	29,200	16,800 13,800
Milwaukee: Racine	41	8,400	10,700	13,500 <i>10,50</i> 0	17,900	28,600	15,300 12,800
Indianapolis: Lafayette- West Lafayette: Anderson-Muncie	50	8.900	11,100	14,600	18,800	28,800	16,200
Peoria; Bloomington- Normal; Champaign- Urbana	27	10,000	11,500	15,000	17,000	22,500	15,200
East North Central—Tota	 al 776 	9,300	12,100	14,400 12,500	18,000	27,200	15,700 13,500

<sup>\*</sup>SMSA not reported in 1973 survey.



Table 4f. Salary Distribution in the West North Central Census Region

SMSA	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Kansas City; St. Joseph	29	\$7,000	\$10,400	\$13.100 10,500	\$17,200	\$24,500	\$14,400 11,000
Minneapolis-St. Paul	69	8,700	12.000	14.400 12,500	17,500	23,400	15,000 <i>12,700</i>
St. Louis, MoIII.	50	9,100	11,000	12,800 12,500	17,200	26.100	14,500 13,600
West North Central —Total	203	8,600	11,300	13,600 11,500	17.200	25,200	14,700 12,500

Note: The numbers in italics are from the 1973 survey.



Table 4g. Salary Distribution in the West South Central Census Region

SMSA	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)		Avg. of Highest 10%	Mean (Average)
Oklahoma City; Tulsa	20	\$7,900	\$10,900	\$12,500 <i>9,500</i>	\$14,000	\$24,100	\$13,500 11,600
Houston; Galveston- Texas City: Beaumor Port Arthur	nt- 74-	8.700	11,300	14,200 11,500	17,500	29,400	15,400 12,300
Dallas; Ft. Worth; Sherman-Denison	35	9,200	10,900	13,500 11,500	18,200	27.500	15,500 12,000
West South Central —Total	195	8,700	11,400	13,800 11,500	16,900	29.000	15,300 12,600



Table 4h. Salary Distribution in the Mountain States Census Region

SMSA	No. Respondents	Avg. of Lowest 10%	25th	50th Percentile (Median)		Avg. of Highest 10%	Mean (Average)
Denver; Colorado Springs; Pueblo	1	\$8,700	\$11,600	\$14,000 11,500	\$17,500	\$25,400	\$15,000 12,600
Mountain States—Total	149	8,800	11,500	14,000 12,500	17,500	24,400	14,900 13,100

Note: The numbers in italics are from the 1973 survey.



Table 4i. Salary Distribution in the Pacific Coast Census Region

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Seattle-Everett; Tacoma	66	\$8,500	\$11,600	\$14,000 10,500	\$17,000	\$34,100	\$15,700 11,200
Portland: Salem: Eugene	21	78,700	13,000	14,400	15,700	26,200	15,500
S.FOakland; San Jose; Stockton; Vallejo-Napa Sacramento	a;   230	9.700	13,000	15,700 12,500	18,800	26,400	16,300 13,700
L.ALong Beach; Santa Barbara; Oxnard-Ventura	207	9,700	12,000	15,300 12,500	19,400	29,100	16,600 13,400
San Diego	35	10,400	12,200	15,000 13,500	17,400	22,700	15,400 13,900
Pacific Coast—Total	599	9,600	12,400	15,200 12,500	18,400	28,100	

<sup>\*</sup>SMSA not reported in 1973 survey.

Table 4j. Salary Distribution in Canada

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Montreal	76	\$10,700	\$13,000	\$15,900 10,500	\$18,400	\$24,300	\$16,100 11,900
Ottawa	31	10,700	16.300	17,500 14,500	19,000	26,700	18,100 15,300
Taranto	126	10,300	12.900	14,800 10,500	17.500	26,300	15,800 11,900
Canada—Total	283	10,500	13,100	15,800 <i>11,500</i>	18,700	26,500	16,600 12,700

Note: The numbers in italics are from the 1973 survey.

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Table 5a. Salary Distribution by Type of Institution or Business Served in Rank Order by Mean Salaries

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)		Avg. of Highest 10%	Mean (Average)
Federal Government (U.S. or Canada) Public Library Academic (general campullibrary)	250	\$12,400 9,900 9,200		\$19,000 15,900	\$23,300 18,300	\$32,000 27,600 29,200	16,500
Academic (subject department or research institute) Non-Federal Government	563	9,100		14,800	18,000	28,200	15,800
(state, provincial, local, international) For-Profit Company or	216	9,700	12,300	14,600	18,000	27,800	15,700
Organization Not-for-Profit Institution, Organization, or Association	1,646	9,200	12,000	14,800	18,000	27,000	15,700
(non-academic) Other	515 95	9,100 9,500	<b>通過</b>	14,200 16,400	17.500 20.200	25,700 30,400	15,100 17,600

Table 5b. Library or Information Center

Organizational Entity	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Library	3,357	\$9,400	\$12,200	\$15,000	\$18,200	\$27,500	\$16,000
Information Center	425	9,300	13,000	15.600	20,000	30,400	17,100
Other	410	9,200	13,100	17,000	22,000	32,000	18,200

Table 6a. Total Persons Supervised

No. Supervised	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
0	993	\$8,700	\$11,200	\$13,400	\$16,000	\$26,800	\$14,500
1 2 3 4 5	771 571 400 269 201	8.900 9,500 9,300 10,100 10,300	11,700 12,000 12,600 13,400 13,200	13,700 14,500 15,200 15,800 16,200	16,000 16,800 17,900 18,800 19,500	22,200 22,800 23,500 25,200 26,600	14.100 14.900 15.500 16.300 16.800
6	144	9,400	14,000	16,700	19,800	27,100	17,300
7	119	10,800	14,400	17,900	21,000	28,800	18,200
8	80	11,100	15,100	19,000	22,200	31,300	19,500
9	73	11,600	15,300	18,200	21,200	29,000	18,900
10	79	10,900	14,500	17.500	21,100	30,500	18,500
11-15 16-20 20 +	195 108 229	13.000 12.100 15.200	17,100 17,000 20,400	20,000 20,000 25,000	23.800 24.400 30.000	30,600 30,100 38,000	20,700 20,600 25,500

Table 6b. Total Professionals Supervised

No. Supervised	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
0	2,683	\$8,900	\$11,500	\$13,700	\$16,300	\$23,700	\$14,400
1 2 3 2	580 277 169 104	10.800 11.400 12.600 11.700	14.000 15.000 16.200 17.000	18,000 18,000 19,000 19,800	19,000 21,000 22,500 22,500	25,700 27,100 27,900 31,000	20,400
<b>基础</b> 。20	1 P 994, 1	13,900	18,000	121,000	- 24,5001	534,200	24,900
6	56	14,900	18,500	23,000	26,700	31,500	23,200
7	33	15,400	19,500	23,500	26,500	32,300	23,200
8	40	14,900	19,000	23,800	27,300	35,800	24,100
9	31	15,100	19,000	21,500	25,200	32,500	22,600
10	30	14,500	19,200	23,500	28,000	35,800	24,300
11-15 16-20 120+7	61 23 47	96,100 16,700 20,500	21,000 21,900 24,700	125,500 4.25,000 29,700	30,000 32,400 33,000	37,100 49,900 37,200	25:800 28:200 28:400

Table 6c. Number of Library Technicians Supervised

No. Supervised	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
0	2,393	\$8,900	\$11,800	\$14,300	\$17,500	\$27,300	\$15,300
是第 <b>-1</b> 指数()。 图 - <b>17</b> 12年2月	688 362	9.900 10.600	112 500 14 550	15,000 18,600	17,900	25,006 25,600	16500 17500
<b>有一种</b>	# Apa	9,900	13.800	47,400	21,000	29,100	17,900
5		10,100	15,000 15,000	19,200 18,700	23,000 22,400	30/200 32,100	19,400 19,400
6	39	13,900	17,500	21,000	25,000	32,500	21,600
7	28	14,600	16,000	19,800	25,000	34,900	21,700
8	20	10,200	15,600	20,200	24,500	36,800	21,500
9	19	12,200	19,400	23,900	26,900	36,400	23,600
10	19	13,600	18,000	23,600	25,700	35,900	23,200
-11-16 -16-20 -20 -	48 22 31	14.700 13.100 18.600	19 500 21 300 22 900	23,000 23,000 29,700	26,900 27,600 33,100	35,500 33,500 36,900	23.800 23.800 28.800

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Table 6d. Number of Clerks Supervised

No. Supervised	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
0	1,641	\$9,000	\$11,700	\$14,100	\$17,400	\$26,900	\$15,200
1 2 3 4 5	1,064 508 310 165 124	9,200 9,300 10,200 9,400 10,300	12,000 12,500 13,000 14,000 13,680	14.800 15.000 16.000 17.100 17.500	17,500 18,400 20,000 20,700 21,900	25,400 26,905 27,200 30,400 23,800	18,120 16,900
6	85	12,100	15,700	18,500	23,500	32,000	19,900
7	43	13,800	17,000	19,000	24,000	33,300	21,100
8	43	10,400	14,300	17,200	21,100	27,700	18,000
9	34	11,400	16,000	19,300	22,800	27,700	19,400
10	30	11,500	17,000	19,500	26,500	35,300	22,000
11-15 18-20 20+	27 30 79	11,800 12,600 13,900	16,400 19,500 19,000	20,000 24,000 24,100	25,000 27,000 30,100	33,800 42,500 37,000	21,000 24,400 24,900

Table 6e. Primary Responsibility in Rank Order of Mean Salaries

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)		Avg. of Highest 10%	Mean (Average)
Library School Faculty	56	\$16,000	\$19,400	\$21,500	\$27,500	\$34,300	\$23,400
Administrative				e day a day	基础系统	AND IN	
Responsibility	1.307	11,800	45,800	19,000	23,600	32,800	20,100
Not Employed in Library	47	8.100	14,400	17,500	24,000	30,500	18,800
Information Specialist	206	10,000	12,600	15.000	18,500	24,900	15,800
Bibliographer or							1
Literature Searcher	82	10,000	12,100	14,400	17,600	25,100	15,300
Abstractor or Indexer	28	9,900	11,300	13,900	16,900	26,800	15,100
Acquisitions or							
Cataloging	320	9,400	12,000	14,000	16,200	23,300	14,700
Documents or Reports Reader Service or	53	9,300	11,700	13,900	15,100	20,200	13,800
Reference	437	9,300	11,700	13.700	16,400	21,200	14,200
General Responsibilities (in a one /or			1236	Late Land			7675
two-person library	1.425	8,600	11,200	18,200	15,700	20,900	13.700
Other	116	8,900	12,100	15,000	17,700	27,900	15,900

\$15,000. The highest salary category continues to be library school faculty, but this median has only increased from \$21,000 in 1973 to \$21,500 in 1976 (a 2% increase).

There is only a difference of \$700 in the mean salaries for those employed in abstracting or indexing, acquisitions or cataloging, documents or reports, and reader service or references. Thus it is questionable if there is any real salary distinction for these functions.

# Academic Background and Professional Experience

It is probably not surprising to find that salaries are, in general, proportional to the highest academic degree of the respondents (Tables 7a, 7b). The median for a Master's degree in library science is \$15,000 while the median for a Master's degree in a subject field is \$16,200. The reverse situation occurs for a Bachelor's degree where the median in library science is \$17,000 and the median in a subject field

is \$15,000. As in the 1973 survey, this may be explained by a sub-analysis of the ages of respondents with a Bachelor's degree in library science: 78% are over 40 years of age and 61% are over 50 years of age.

When the disciplines (in which subject degrees are held) are compared (Table 7c), the highest continues to be law with a median of \$19,400 (a 24% increase), followed by engineering at \$17,900 (a 15% increase). Physical sciences at \$16,500 in third place (a 22% increase) and business. commerce, or economics at \$16,000 in fourth place (an 18% increase) have moved ahead of earth sciences at \$15,500 (a 24% increase) which was in third place in the 1973 survey. It is interesting to note that in 1976 the medians are identical (\$15,000) for education, English and journalism, foreign languages, and philosophy and religion.

#### Years of Experience

The progression of salary with years of professional experience is in Table 7d

Table 7a. Salary Distribution by Educational Level: Highest Subject Degree

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Doctorate	85	\$12,100	\$16,700	\$23,500	\$28,600	\$38,100	\$23,500
Master	753	10,000	13,200	16,200	20,000	29,800	17,400
Bachelor	2,644	9,400	12,200	15,000	18,100	27,300	15,900
Associate	37	7,200	8,800	11,800	13,500	19,700	12,000
No Degree	196	7,900	11,200	13,500	16,400	25,200	14,400
No College	38	8,200	11,500	12,600	15,000	22,700	13,600
Overall	3,753	9,300	12,400	15,000	18,700	28,400	16,200

Table 7b. Salary Distribution by Educational Level: Highest Library/Information Science Degree

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Doctorate	49	\$12,300	\$20,000	\$23,500	\$28,800	\$36,100	\$24,100
Master	3.043	9,600	12,400	15,000	18,400	27,900	16,200
Bachelor	327	10,300	14,800	17,000	20,400	27,500	17,700
Associate	30	7,700	10,800	11,600	14,000	21,100	12,900
Overail	3,449	9,600	12,500	15,300	18,900	28,200	16,400

Table 7c. Salary Distribution by Subject Field in Rank Order by Mean Salaries

Subject Field	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Law Engineering Physical Sciences	48 1 89 457	10 300 111 100 840 800	15,000	\$19,400 17,900 16,500	\$23,700 ; 23,506; 26,200	514 900 32 700 20 506	\$20,200 19,400 17,500
Business, Commerce, or Economics Earth Sciences Philosophy & Religion Biomedical Sciences Liberal Arts	219 90 71 279 574	10,500 10,900 8,300 9,700 9,500	12,000	16,000 15,500 15,000 15,200 15,400	19,400 20,300 18,500 18,700 19,000	29,600 29,400 30,500 29,600 27,600	17,100 16,800
Education English & Journalism Scriel Sciences Foreign Languages Fine & Applied Arts	349 741 728 260	9,000 9,000 9,500 9,200 9,700	12,400 12,000	15,000 15,000 14,800 16,000	18.400 19.009 18.400 18.000	28.800 28.400 29.000 28.200	16,200 146,200 116,100
(Art. Architecture,	<b>160</b>	<b>8,000</b> 9,200		13,500 15,500	<b>18.00</b> 0	<b>24.100</b> 29.100	<b>14.300</b> 16,500

Table 7d. Years of Professional Library Experience

Years	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
1-5	1,290	\$8,600	\$10,900	\$12,300	\$14,400	\$19,400	\$12,900
6–10	922	10,100	13,000	15,000	17,500	24,400	15,600
11-15	568	11,100	14,600	17,000	20,000	28,200	17,800
16-20	391	11,400	15,000	17,800	21,700	30,200	18,700
21-25	353	13,000	16,700	20.000	24,700	33,900	21,300
26+	454	12,100	16,000	19,500	24,100	34,100	20,800

Table 7e. Total Professional Experience (Library Experience Plus Other Professional Experience)

Years	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
1-5	1,002	\$8,500	\$10,500	\$12,000	\$14,000	\$18,600	\$12,500
6–10	914	9,400	12,100	14,000	16,300	22,400	14,600
11-15	592	9,900	13,600	15,900	18,900	27,300	16,700
16-20	463	10,300	14,200	16,800	20,000	28,700	17,600
21-25	477	11,600	15,700	18,700	23,300	31,100	19,800
26 +	754	11,500	15,500	18,900	23.900	33,600	20,200

Table 7f. Mean and Median Salaries by Number of Years with Present Employer

	Respo	ndents	50th Percentile	Mean	
Years	No.	%	(Median)	(Average)	
1 or less	51	1%	\$13,000	\$13,700	-
1	516	12	12,500	13,500	
2	568	13	13,000	14,000	
3	459	11	13,500	14,600	
4	296	7	14,400	15,500	
5	256	6	15,000	15,900	
5 or less Subtotal		50%			
6-10	943	23	\$16,000	\$17,200	
11–15	406	10	17,700	18,500	
16–20	299	7	17,600	18,900	
21–25	195	5	19,200	19,900	
26 +	214	5	19,800	20,400	
6 or more Subtotal		50%			
		100%			

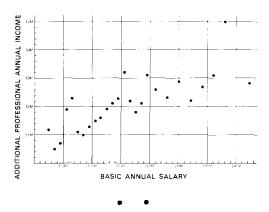
Table 7g. Mean and Median Salaries by Number of Employers

No.	Respo	ndents	50th Percentile	Mean	
Employers	No.	%	(Median)	(Average)	
1	1,426	34%	\$13,500	\$14,500	
2	1,096	26	14,800	15,700	
1 or 2 Subtotal		60%			
3	695	17	16,000	17,100	
4	427	10	17,300	18,400	
5	254	6	17,600	19,100	
6	130	3	18,400	20,100	
7	56	1	19,300	20,500	
8	45	1	18,800	20,000	
9	17	< 1	22,000	21,400	
10+	34	1	17,200	18,100	
3 or more Subtotal		40%			

Table 7h. Salary Distribution of Recent Graduates

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
New Graduates	129	\$8,200	\$9,700	\$10,500	\$11,900	\$16,200	\$11,000
Overall Survey	4,233	9,300	12,400	15,000	18,800	28,500	16,300

Figure 3. Additional Professional Income Derived from Consulting Fees, Honoraria, Royalties.



(Professional Library Experience) and in Table 7e (Total Professional Library and Other Professional Experience). In the 5-year intervals reported, there is a continuous upward progression in both tables for both the mean and median salaries until the "26+ year" interval when a small decrease is noted in "Library Experience" but not in "Total Professional Experience." This may be related to an age factor rather than any relation of "years of experience" as such.

As the basic annual salary increases, so also does the additional incremental professional income derived from bonuses, profit sharing, royalties, honoraria, consulting fees, etc., up to a level of about \$20,000. Above that level there is some leveling off but no regular trend (Figure 3).

One-half (50%) of the respondents reported employment for 6 years or more with their present employer. Tabulation of mean salaries for increasing years with the same employer shows steady but not spectacular increases for additional seniority (Table 7f).

A tabulation of number of employers versus mean salaries seems to indicate that higher salaries are reported by respondents who have worked for a number of employers up to seven (Table 7g). For more than seven employers, the increases reported are not uniform. Because it is not possible to attempt any

Table 8a. Age Distribution

Age Group	1967	1970	1973	1976
20-29	8%	10%	16%	21%
30-39	21	18	21	24
40-49	32	32	27	23
50-59	30	29	27	25
60 & Over	8	10	9	7
No Response	1	1	< 1	< < 1
	100%	100%	100%	100%

No. Respondents 3,867 3,594 3,893 4,233 Mean Age 46 46 44 42

• •

cross-correlation between Tables 7f and 7g, there can only be a tentative suggestion that, in general, each change of employer may result in a larger upward increment than does continuing years of employment at the same location. (Many other factors may also be operative such as increasing retirement benefits, longer vacations, etc.)

Because 50% of the respondents report one employer for periods for 6 years or more, and because 60% of the respondents report only 1 or 2 employers, it may be correct to adduce that a relatively stable employee-employer relation exists. (This is not necessarily contradicted by the observations from membership records that approximately 35% of the Association's members change their address each year; the 35% includes changes in residence addresses as well as business addresses.)

### **Recent Graduates**

The surveys were not designed to identify the salaries of new graduates of library schools because of the other variables that enter into the earlier professional experience of some respondents. However, from the 1976 survey a group of 129 respondents could be identified whose total professional working experience was one year or less and who also had had only one employer. It seems relatively safe to assume that such respondents graduated between Apr 1, 1975, and Mar 31, 1976. Their salary distribution is in Table 7h.

Table 8b. Salary Distribution by Age Group

Age Group	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
20-29	872	\$8,600	\$10,600	\$12,000	\$13,900	\$17,400	\$12,400
30-39	1,028	9,500	12,500	14,800	17,500	23,800	15,300
40-49	949	9,900	13,800	17,000	21,000	30,500	17,900
50-59	1,041	10,200	14,000	17,300	21,500	31,300	18,400
60 & Over	303	10,800	14,400	17,100	21,800	32,100	18,700

Table 9a. Salary Distribution by Sex

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Females	3,277	\$9,100	\$12,000	\$14,700 12,500	\$17,900	\$25,300	\$15,400 12,900
Males	871	10,300	14,100	18,100 16,500	24,200	34,300	19,700 17,200
No Response to Question	85						
Total Survey	4,233	9,300	12,400	15,000 12,800	18,800	28,500	16,300 14,000

<sup>\*</sup>Percentiles were not calculated in 1973; Medians and means in italics are from the 1973 Survey.

Table 9b. Salary Distribution by Cross-Correlation of Age and Sex

Age Group	Sex	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
20-29	Male	97	\$8,800	\$10,500	\$12,000	\$13,900	\$17,700	\$12,600
	Female	769	8,600	10,600	12,000	13,900	17,300	12,400
30-39	Male Female	220 793	10,600 9,200	13,200 12,200	15,500 14,700	19,300 17,000	28,100 22,200	16,000 14,900
40-49	Male	241	11,500	16,200	20,400	25,500	34,700	21,400
	Female	698	9,600	13,200	16,100	19,400	27,000	16,700
50-59	Male	247	11,600	16,900	22,100	26,900	37,000	22,600
	Female	779	9,900	13,500	16,400	20,000	27,500	17,100
60 & Over	Male	66	11,900	17,000	21,000	27,800	37,600	22,900
	Female	235	10,800	14,000	16,400	20,300	28,700	17,600

Table 9c. Changes in Earnings by Sex Table 9d. Sex Distribution

	Medi	an	Mea	in
Females				
1973	\$12,500		\$12.900	
1976	\$14,700		\$15,400	
Increase	\$2,200	(18%)	\$2,500	(19%)
Males				
1973	\$16,500		\$17,200	
1976	\$18,100		\$19,700	
Increase	\$1,600	(10%)	\$2,500	(14%)

Ratio of Female 5	Salary to Male Salary	
1973	76%	75%
1976	81%	78%

	1970	1973	1976
Females	61%	76%	79%
Males	20	22	21
No Response	19	2	< < 1
	100%	100%	100%
Female: Male Ratio No. Respondents	3.0:1 3,594	3.4:1 3,893	3.8:1 4,233

### Age and Sex

With regard to age (Table 8a) there appears to be a significant increase in the number of 1976 respondents who are in the 20-29 age group (24% as compared to 16% in 1973 and 10% in 1970). The mean age in the survey has decreased to 42; and the overall age distribution is now almost evenly distributed by decades from 20 through 59. Because this trend has been continuous from 1967 to 1976, it now appears definite that more persons are entering a career in special librarianship directly from the universities.

The salary distribution by age is in Table 8b. The salary distributions by sex are in Table 9a.

A cross-correlation of age and sex is in Table 9b. The salary distribution is almost identical for males and females in the 20 29 year age group. A difference in favor of males begins in the 30 39 year decade, and increases through the 40-49 and 50-59 decades. The differences above age 60 are almost the same as in the 50-59 decade.

The relative changes from 1973 to 1976 in medians and means for both females and males are in Table 9c. The increases for female respondents are larger both in absolute dollars and in percentages than the increases for male respondents.

In 1973 the median salary for females was 76% of that for males. In 1976 the

median salary for females has increased to 81% of that for males. The ratio of mean salaries of females to males has increased from 75% in 1973 to 78% in 1976.

The ratio of female to male respondents shows a continuing increase from 1970 to 1973 to 1976 (Table 9d). This increasing female/male ratio is contrary to what has been stated in past years from subjective observations of attendance at meetings and the like.

# **Minority Groups**

A question was added in the 1973 survey in an attempt to determine the relative representation of members of minority groups among SLA members. The question was again included in the 1976 survey. The distribution of the respondents is in Table 10a. (Also see the Note on p. 603.)

Because all respondents (regardless of race or minority group) did not report their salaries, the total respondents in Table 10b is less than the total in Table 10a. The means and medians for all minority groups are below the overall survey. Cross-distribution of race versus age are reported in Table 10c.

The sex ratio for blacks and Asian respondents shows a higher ratio of women to men than the total survey (Table 10d). A cross-correlation between minority groups and sex is in Table 10e.

Table 10a. Distribution by Race or Minority Group

	1973		19	76		rease 73-76
	Respo	Respondents		ndents		
	No.	%	No.	%	No.	%_
Black	56	1.4%	64	1.5%	8	14%
Asian	78	2.0%	96	2.3%	18	23%
Other (incldg. North American Indian, Eskimo, Spanish-						
speaking)	11	0.3%	32	0.7%	21	191%
Sub-Total	145	3.7%	192	4.5%		
White	3,677	94.5%	4,014	94.8%		
No Response to	}					
Question	71	1.8%	27	<0.7%		
Total	3,893	100%	4,233	100%		

Table 10b. Salary Distribution by Race or Minority Group

	No. Respondents	Avg. of Lowest 10%	25th Percentile	50th Percentile (Median)	75th Percentile	Avg. of Highest 10%	Mean (Average)
Overall Survey	4,233	\$9,300	\$12,400	\$15,000	\$18,800	\$28,500	\$16,300
White	4,014	9,300	12,400	15,000	19,000	28,600	16,400
Black Other (incldg. North American Indian, Eskimo, Spanish-		8,400	11,300	14,000	18,000	30,100	15,700
speaking)	28	10,300	12,400	14,400	17,000	21,300	15,000
Asian	96	9,200	12,000	14,300	16,200	21,800	14,500

Table 10c. Race vs. Age

	1973			1	197	76	
	Survey	Black	Asian	Survey	Black	Asian	Other
20-29	16%	13%	27%	21%	27%	26%	33%
30-39	21	30	38	24	19	43	23
40-49	27	30	25	23	35	21	18
50-59	27	25	8	25	16	10	23
60 +	9	2	2	7	3	< 1	3
	100%	100%	100%	100%	100%	100%	100%

Table 10d. Sex Ratio for Minority Groups

	Female/	Male Ratio
	1973	1976
Blacks	5.5:1	7.7:1
Asians	4.8:1	3.8:1
Other	_	2.9:1
Overall survey	3.4:1	3.8:1

Table 10e. Cross-Correlation of Minority Groups and Sex

		1973		1976	
	Mean Salaries	Female/Male Ratio of Means	Mean Salaries	Female/Male Ratio of Means	
Blacks Females Males	\$14,500 15,600	93%	\$15,200 19,900	76%	
Asians Females Males	11,800 15,300	77%	14,300 15,200	94%	-
Other Females Males	_		14,100 18,000	78%	
Overall Survey Females Males	12,900 17,200	75%	15,400 19,700	78%	-

Table 11a. Membership in Other Associations

	1970	1973	1976
No. Respondents	3,594	3,956	4,232
American Association of Law Libraries	2%	3%	5%
American Chemical Society/Division of Chemical Literature		_	3
American Library Association	28	24	26
American Society for Information Science	20†	18	19
ARLIS/NA	•	_	2
Canadian Library Association	3	3	4
Catholic Library Association	1	1	1
Church & Synagogue Library Association	•	< 1	< 1
Medical Library Association	10	9	10
Music Library Association	< 1	< 1	< 1
Theatre Library Association	< 1	< 1	< 1
Other National Library/Information Associations	21	17	28

Note: The percentage figures are not additive because of multiple memberships.

### Membership in Professional Organizations

Eleven library/information associations for which memberships were tabulated are in Table 11a. Memberships in 16 other professional associations were also reported as well as various state and provincial library associations. The other associations include:

American Association for the Advancement of Science

American Association of Library Schools
American Association of University Professors

American Society of Indexers American Society for Metals

American Statistical Association

Association for Computing Machinery

Association of Records Management Administrators

Canadian Association for Information Science Council of Planning Librarians Drug Information Association Federal Library Association

Geoscience Information Society National Micrographics Association

Society of American Archivists
Technical Association of the Pulp & Paper Industry

Table 11b. SLA Dues Paid by Employer

	19 Respon		1976 Respondents		
% Dues Paid	No.	%	No.	%	
100%	1,403	35%	1,720	41%	
Other Amounts	38	1	30	< 1	
0%	2,411	61	2,449	58	
No Response	104	3	34	<1_	
	3,956	100%	4,233	100%	

A concern often mentioned by SLA members is whether Association dues are paid in whole or in part by the employer. These replies are in Table 11b. There appears to be no correlation between salary and the fraction of dues paid by an employer.

<sup>\*</sup>Organized after the 1970 survey.

<sup>†</sup> Both SLA and ASIS published membership directories as of Jun 30, 1970. The 1970 SLA Salary Survey was conducted in January 1970. An "eyeball" comparison of the two directories showed 712 names that appeared in both. In the 1970 Salary Survey, 709 SLA members also reported ASIS membership. Thus almost 100% of the respondents reporting membership in both organizations had apparently returned the 1970 SLA survey, although the overall return of the 1970 SLA survey was 60%. Because the two organizations have not published their post-1970 directories as of the same date since 1970, it has not been possible to use this independent criterion in relation to the responses of the 1973 or 1976 surveys.

Table 12a. Employment Status

	Apr 1, 1973	Apr 1, 1976
Full-Time Employed	3,723	4,265
Part-Time Employed	57	184
Not Employed &		
Not Seeking	30	24
Unemployed & Seeking	41	61
Retired	12*	11*
No Response to Question	10	0
Invalid—Conflicting		
responses	20	6
TOTAL	3,893	4,551

<sup>\*</sup>These respondents apparently had not converted their SLA membership category to "Retired Member" because the Survey Questionnaires had not been mailed to Retired Members.

Table 12b. Unemployment from Apr 1, 1975 through Mar 31, 1976

Unemployed for any period of time	
Terminated by employer	79
Terminated on respondent's	
initiative	164
No reason reported for	
termination	91
TOTAL	334

### Unemployment

Because of concerns about the economy in 1972 and 1973, questions concerning unemployment were included in the 1973 survey. The 1976 survey again included questions to attempt to define the number of respondents unemployed and the periods of unemployment during the 12 month period from Apr 1, 1975, through Mar 31, 1976. The employment status of respondents on the survey date (Apr 1, 1976) is in Table 12a.

The total number of respondents who reported any period of unemployment in the 1976 survey was 71% of those in the 1973 survey. For the period Apr 1, 1975-Mar 31, 1976, a total of 334 respondents (8% compared to 12% in 1973) reported some period of unemployment

Table 12c. Location of Respondents
Unemployed for Part or All of the Period,
Apr. 1, 1975–Mar. 31, 1976

	Number			
Census Region	1973	1976		
Middle Atlantic (New York 26)	123	53		
Pacific	92	29		
East North Central	85	36		
South Atlantic	62	26		

(Table 12b), but of these 334 only 79 reported that they had been "terminated by employer" (2% of the total respondents compared to 3% in 1973). Of the 334 reporting unemployment, 164 reported that their employment had been terminated on their "own initiative" (4% of the total respondents compared to 6% in 1973).

Of the respondents who reported that they had been unemployed, the average period of unemployment was 5 months.

The number of respondents in a Census Region who reported any period of unemployment in the designated 12 month period is in Table 12c if there are more than 20 respondents in the Census Region. Only 4 such Regions are listed in 1976 compared to 7 Regions in 1973. In the 4 Regions listed the number of unemployed respondents is 144 in 1976 compared to 362 in 1973. Only one SMSA (New York Metropolitan) is identified in Table 12c because this SMSA has more than 20 respondents in this category.

FEMcK, FB, CA, CSK, REG

### Literature Cited

- A Study of 1967 Annual Salaries of Members of the Special Libraries Association. Special Libraries 58 (no.4):217-254 (Apr 1967).
- 2. SLA Salary Survey 1970. Special Libraries 61 (no.6):333-348 (Jul/Aug 1970).
- SLA Salary Survey 1973 (Preliminary report). Special Libraries 64 (no.9):381 (Sep 1973).
- Special Libraries Association Personnel Survey 1959. Special Libraries 51 (no.3):133-157 (Mar 1960).
- 5. Special Libraries 62 (no.12):540 (1971).

# Appendix A. Other Salary Surveys or Salary Data

There were few, if any, comparable surveys for other professions in either 1975 or 1976. Some fragments do provide some points for comparison.

### U.S. Federal Salaries

The U.S. federal salary schedules effective Oct 13, 1975, and Oct 11, 1976, are:

GS-7	1975	\$11,046 -\$14,358
	1976	11,523 - 14,979
GS-8	1975	12,222 - 15,885
	1976	12,763 - 16,588
GS-9	1975	13,482 - 17,523
	1976	14,097 - 18,327
GS-10	1975	14,824 - 19,270
	1976	15,524 - 20,177
GS-11	1975	16,255 - 21,133
	1976	17,056 - 22,177
GS-12	1975	19,386 - 25,200
	1976	20,442 - 26,571
GS-13	1975	22,906 - 29,782
	1976	24,308 - 31,598
GS-14	1975	26,861 - 34,916
	1976	28,725 - 37,347
GS-15	1975	31,309 - 40,705*
	1976	33,789 - 43,923*
GS-16	1975	36,338 - 46,026*
	1976	39,629*- 50,197*
GS-17	1975	42,066*- 47,674*
	1976	46,423*- 52,611*
GS-18	1975	48,654*
	1976	54,410*

\*The rate of basic pay for employees at these levels is limited by Sect. 5308 of Title 5 of the U.S. Code, to the rate for Level V of the Executive Schedule (as of the effective date of this salary adjustment) that is \$39,600.

Candidates without experience but with an MLS qualify for Grade 9 positions. Candidates with one year graduate library training, but without a degree, qualify for Grade 7. The 1975 increase was a 5% increase despite a recommendation of a federal panel that this increase by 8.66% to keep federal salaries comparable to those in industry (1).

### **Academic Librarians**

The National Education Association reported a median salary of \$16,417 for 787 chief librarians and directors of libraries in 1973/74(2). For comparison the median for all academic librarians in the SLA 1976 survey was \$14,700.

A report of the economic status of university faculty for 1975-76 was published in mid-1976 by the American Association of University Professors. A weighted mean salary of \$13,330 for head librarians and associate and/or assistant librarians is reported for 883 universities and colleges of all types combined. The weighted mean for 438 librarians in public institutions is \$14,170 (4). In the AAUP report there is a discussion of efforts to obtain access to data collected by the National Center for Education Statistics, and specifically to data from the Fall 1975 LIBRIS Survey by NCES. The NCES definition for professional librarians is reported by AAUP to be as follows (4):

"'Staff members doing work that requires professional training and skill in the theoretical and/or scientific aspect of library work, as distinct from its mechanical or clerical aspect.' A professional librarian is reported as full-time if the normal work week is thirty-two hours or more."

Preliminary salary data for the male/female components of the instructional faculties were collected by the National Center for Education Statistics in 1974 (5). Female salaries were 82.9% of male salaries in 1972 and 83.2% in 1974.

### Sex, Age & Minorities

A series of studies by the American Chemical Society (6) from 1962 to 1974 shows that median starting salaries for women have improved from a bias of 13.7% in 1961 for females as compared to males to a bias of only 2.1% in 1974. These results are in apparent agreement with the 1976 SLA Survey that sex parity in SLA also does now exist in the 20-29 age group.

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A survey by the American Chemical Society in 1974 (7) showed that the longer women chemists work, the farther below they fell in comparison with men. Female B.S. chemists with 2-4 years of experience earn only \$800 less than males, but females with 30-34 years of experience earn \$5,000 less per year. This increasing salary gap between male and female chemists the longer they work is also true for persons with advanced degrees. This observation is similar to the result of the 1976 SLA Salary Survey.

A 1975 survey of nearly 50,000 members of the Institute of Electrical and Electronic Engineers (8) reported their median salary to be \$23,544 (as compared to the 1976 SLA overall median of \$15,000). Female electrical engineers have a reported mean of \$19,697 as compared to a mean of \$23,715 for males, or a sexbased bias of 17%.

Interestingly, the mean age of IEEE members was 41.9 years as compared to a mean age of 42 for SLA members. This observation alone should bring a halt to the suggestive reporting that has occurred in some American library periodicals that SLA members are peculiarly "middle-aged and satisfied."

The IEEE also identified its minority members (9); a comparison of the racial composition of IEEE and SLA shows that SLA has a somewhat higher percentage of non-white members:

	IEEE	SLA
White	96.4%	94.8%
Asian	2.6	2.3
Black	0.4	1.5
Other	0.5	0.7

The same relative race-related salary bias occurs in both organizations.

### **Census Regions**

The geographic variations of median salaries for engineers was determined in the Engineering Manpower Commission's 1974 report (10). The EMC variations by Census Regions are quite different from the 1976 SLA distributions:

	EMC 1974	SLA 1976
East North Central	1	5
Middle Atlantic	2	2
Pacific	3	3
Mountain States	4	8
West North Central	5	9
South Atlantic	6	1
South Central	7	<b>4*/7</b> †
New England	8	6

<sup>\*</sup>East South Central
†West South Central

### Miscellaneous

A U.S. Department of Labor news release in 1975 for white collar occupations did not include librarians, although it did list accountants, chemists, engineers, attorneys, and a number of non-professional occupations (11).

The College Placement Council is obviously unaware that the MLS is the standard library degree. The College Placement Council reports salary offers in 1973/74 and 1974/75 for "Library and Related Work" for bachelor's degree candidates (12).

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- National Education Association / "Salaries Paid and Salary-Related Practices in Higher Education, 1973-74." Research Memo 1974-1. Nov 1974.
- 3. American Association of University Professors / Nearly Keeping Up: Report on the Economic Status of the Profession, 1975-76. AAUP Bulletin (Summer 1976); also available as a separate reprint, p. 33.
- 4. NCES. In Ref (3), p. 7.
- 5. NCES. In Ref (1), p. 86.
- 6. Chemical & Engineering News. In Ref (1), p. 17.
- 7. American Chemical Society / "Professionals in Chemistry in 1974." p. 26.
- 8. IEEE. In Ref (1), p. 55.
- 9. IEEE. In Ref (1), p. 70.
- Engineering Manpower Commission / "Professional Income of Engineers, 1974." In Ref (1), p. 54, 59.

- U.S. Department of Labor / "Number and Average Salaries for Selected White-Collar Occupations in Industry, March 1975." News Release 75-373.
- College Placement Council / "A Study of 1974-75 Beginning Offers, Final Report." Jul 1975.

# Appendix B. 1976 SLA Salary Survey Questionnaire

Geographical area of employment			EAST NORTH CENTRAL		6-41
U.S. (including APOs, P.R., V.I.)			(Ohio, Ind., Ill., Mich., Wis.) Chicago; Gary—Hammond—East		
Indicate the geographical area in which		ou	Chicago		-42
are employed by checking either: (1) the	Cincinnati; Dayton		-43		
Standard Metropolitan Statistical Are			Cleveland; Akron; Canton;		
the broad geographical census region metropolitan area is not listed.	пуо	ur	Youngstown—Warren		-44
Do not check more than one box.			Detroit; Flint; Kalamazoo;		
Do not check more than one box.			Jackson; Ann Arbor		-45
NEW ENGLAND		6-01	Milwaukee; Racine		-46
		0-01	Indianapolis; Lafayette-West		
(Me., N.H., Vt., Mass., R.I., Ct.)			Lafayette; Anderson—Muncie		-47
Boston; Lowell; Brockton		-02	Peoria; Bloomington—Normal;		
Hartford; Springfield—	_		Champaign — Urbana		-48
Chicopee—Holyoke		-03			
New Haven; Bridgeport; Norwalk;	_				
Stamford		-04	WEST NORTH CENTRAL		6-51
MIDDLE ATLANTIC		6-11	(Minn., Ia., Mo., N.D., S.D., Nebr.,		
(N.Y., N.J., Pa.)			Kan.)	_	٠.
			Kansas City; St. Joseph		-52
New York, N.Y. (NYC), Nassau,			Minneapolis—St. Paul		-53
Suffolk, Westchester &		-12	St. Louis, Mo.— Ill.		-54
Rockland)	LJ	~12			
Newark, N.J. (Essex, Morris & Union); Jersey City; Paterson—			WEST SOUTH CENTRAL		6-61
Clifton—Passaic; Middlesex;			(Ark., La., Okla., Tex.)		
Somerset		-13	Oklahoma City; Tulsa		-62
Philadelphia, Pa.—N.J.; Trenton,	ш	-13	New Orleans	$\tilde{\Box}$	-63
Reading; Lancaster		-14	Houston; Galveston—Texas City;		-05
Albany—Schenectady—Troy		-15	Beaumont—Port Arthur		-64
Syracuse; Utica—Rome		-16	Dallas; Fort Worth; Sherman—	~	٠.
Buffalo; Rochester, N.Y.		-17	Denison		-65
Pittsburgh; Johnstown; Altoona		-18	Democri		0.2
ricesourgii, Johnstown, Artoona	_	-10	MOUNTAIN		6-71
SOUTH ATLANTIC		6-21			0-71
(Del., Md., D.C., Va., W.Va., N.C.,	_		(Mont., Idaho, Wyo., Colo., N.M.,		
S.C., Ga., Fla., P.R.)			Ariz., Utah, Nev.) Albuquerque	гэ	-72
Baltimore, Md.; Wilmington, Del.			Denver; Colorado Springs; Pueblo		-73
—N.J.—Md.		-22	Denver, Colorado Springs, Fueblo	ш	-/3
Washington, D.C.—Md.—Va.		-23			
Richmond, Va.		-24	PACIFIC		6-81
Durham; Raleigh		-25	(Wash., Ore., Calif., Alas., Haw.)		
Atlanta		-26	Seattle - Everett; Tacoma		-82
	_		Portland; Salem; Eugene		-83
EAST SOUTH CENTRAL		6-31	S.F.—Oakland; San Jose; Stockton;		
(Ky., Tenn., Ala., Miss.)	_				-84
Knoxville; Nashville		-32	L.A.—Long Beach; Santa Barbara;		
Huntsville; Birmingham;			Oxnard—Ventura		-85
Tuscaloosa; Gadsden		-33	San Diego		-86

	CANADA	_ 🗆	6-91		include su				s. (If ı	un-	
	(All provinces & territories)	_			employed	, enter	"zero	.")			
	Montreal		-92		\$ <sup>-</sup>						
	Ottawa Toronto		-93		17	18	19	20	21		
	Victoria & Vancouver		-94 -95								
	victoria & valicouver		-93	8.	Is salary i	reporte	d in It	em 7 ah	ove		
	OTHER COUNTRIES		6-98		For calen	dar ye	ar (11-	-12 mor	iths)?		22-1
		_			For acade	emic ye	ar (9-	10 mon	ths)?		-2
2.	Age Group										
	Under 20 □ 8-1			9.	Enter you	ır Gros	s Ann	ual Pro	fessio	nal Inc	come
	20-29				from all p						
	30-39				regular bo	onuses.	profit	sharing	g, roy	alties.	•••
	40-49				honoraria	a, cons	ulting	fees, otl	her fee	es, etc.	
	50-59				\$ <u></u>						
	00 & 0vei 🗀 -0				23	24	25	26	27		
3.	Sex										
	 Male □ 9-1			10.	What type	e of ins	stitutio	n or bu	isiness	s is ser	ved
	Female ☐ -2				by the lib	rary in	which	you ar	e emp	loyed?	
					Check on						
4.	Race				a. Federa Canad		ııımen	ι (υ.δ.	or		28-1
	White		10-1		b. Other	govern	ment (	state, p	rovin		20-1
	Black		-2		loca	l, inter	nation	al)			-2
	Asian N. American Indian, Eskimo		-3 -4		c. Public						-3
	Spanish speaking		- <del></del>		d. Acade			n: rtment :			
	Other		-6			search			ога		-4
_					In a	genera	l camp	ous libra	ary	ā	-5
5.	Employment Status on April 1, 1976				e. Other						
	Full-time employed		11-1					ociatior			-6
	Part-time employed		-2		f. For-pr zatio		mpany	or org	anı-		~
	Retired Not employed & not seeking		-3		g. Self-en		d .				-7 -8
	employment		-4		h. In mili	tary se	rvice			Ī.	-9
	Not employed, and seeking				i. Not ot			fied			-A
	employment		-5		j. Not em	iploye	t				-B
6	Unemployment Between April 1, 197	5 000	1								
٥.		Jane	_	11.	Is the orga	ınizati	onal ei	ntity in	which	you a	re
	March 31, 1976				employed a. Library		a:				29-1
	Yes a. Were you unemployed		No		b. Inform		Center				-2
	for any portion of this				c. Other						-3
	period?    12-1		12-2								
	b. Was your employment			12.	Degrees (0	Check	highes	t applic	ahle i	n each	
	terminated				column)						
	By your employer?   On your own	П	13-2					Subject	t Li	brary/	Info
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	c. How many months were				Doctorate Magter			<b>[</b> ] 30-			l-1
	you unemployed?				Master Bachelor						-2 -3
	Insert number (0 to 12)				Associate						-3 -4
					No Degree					ā	-5
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	fessional employment (before deduction	pro- ons f	or		Biomedica Business, c			econon	nice		32-1 33-1
	income tax, social security, retirement	, etc.	.).		Earth scien		01	COHOII	1103		34-1
	Do not include bonuses, overtime, or o	other			Education						35-1
	payments for professional services. De	o not			Engineerin	g					36-1

English and journalism Fine and applied arts (art, architecture, music, speech) Foreign languages Law	☐ 37-1 ☐ 38-1 ☐ 39-1 ☐ 40-1	l. Library School Faculty m. Self-Employed (consultant, etc.) n. Other o. Not employed in a library	D
Liberal arts Physical sciences Philosophy and religion Social sciences Other	☐ 41-1 ☐ 42-1 ☐ 43-1 ☐ 44-1 ☐ 45-1	18. Do you supervise other members of the library staff? Enter the number of professionals (librarians, abstractors, etc.) and the number of technicians and the number of clerks you super-	
14. Number of Employers worked for	full-time	vise.	
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field		Profes- Techni-	
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46 47			
40 47		55 56 57 58 59 60 61 62 6.	3
15. Number of Years with Present Em	ployer	19. Association and Society Memberships.	
		Check the appropriate boxes for each A	s-
48 49		sociation and Society of which you are	
		personal member. For write-ins include	
16. Record the number of years of pro		national and international organization	s; use
library experience and other profe	ssional ex-	identifying words in full:	
perience you have had since receiv	ing your		64-1
Bachelors degree.		American Association of Law	
Prof. Library Other Prof.			65-1
Experience Experience			☐ 66-1
		American Society for Information Science	67-1
			68-1
50 51 52 53			∃ 69-1
17 I 4:			3 09-1 3 70-1
17. Indicate your primary specific resp	onsibility.	Church & Synagogue Library	
(Check only one box):		Association [	71-1
a. General responsibilities (in a o		Medical Library Association	
or two-person library)	54-1		73-1
b. Administrative Responsibility	-2	Theatre Library Association	
c. Abstractor or indexer	□ -3 □ -4	Other 75-1	
d. Acquisitions or cataloging	□ -4	Other 73 1	
e. Bibliographer; Literature searcher	□ -5	20. Are your SLA dues paid by your emplo	ver?
f. Documents or reports	□ -6	100%  76-1	yei.
g. Editor or writer	□ -0 □ -7	75% □ -2	
h. Information specialist	□ -8	50% 🗆 -3	
i. Reader service or reference	-9	25% 🗆 -4	
j. Systems specialist	-Á	0% □ -5	
k. Translator		Other $\square$ % (77-78)	

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	Average no. copies each issue during preceding 12 months	Single issue nearest to filing date
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2. Mail subscriptions	11,964	12,130
C. Total paid circulation	11,964	12,130
D. Free distribution by mail, carrier or other means 1. Samples, complimentary, and other free copies	447	125
E. Total distribution (sum of C and D)	12,411	12,255
F. Copies not distributed 1. Office use, left-over, unaccounted, spoiled after		
printing	659	753
agents	none	none
G. Total (sum of E & F should equal net press run		12.000
shown in A)	13,070	13,008
11 I certify that the statements	made by me	above are

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### SPECIAL LIBRARIES

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